

The Yale Leibniz

The Leibniz-Des Bosses Correspondence

G. W. Leibniz

Translated by Brandon C. Look and Donald Rutherford

The Yale Leibniz

Daniel Garber and Robert C. Sleigh, Jr.

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G. W. Leibniz

The Leibniz–Des Bosses Correspondence

Translated, Edited, and with an Introduction

by Brandon C. Look and Donald Rutherford

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Preface

The Leibniz–Des Bosses correspondence attracted both of us, though at the time separately, as we were working on issues in Leibniz’s metaphysics relating to the nature of matter and substance. Leibniz’s extended exchange with Des Bosses, carried out during the final decade of Leibniz’s life (1706–16), sometimes seemed to raise as many questions as it answered, and this complexity proved fascinating. It was also somewhat frustrating, for only a modest selection of the letters was available in English translation, and the then-standard Latin text of Gerhardt proved on closer inspection to be deficient. Indeed, as we looked through the original manuscripts, not only did we become aware of mistakes in Gerhardt’s edition; we also realized that Leibniz’s drafts and marginal comments contained important clues to a deeper understanding of his thought in general. A critical edition of this correspondence seemed an obvious project to undertake, and we were fortunate that the Yale Leibniz series had been initiated by Bob Sleigh and Dan Garber and that our edition could be incorporated into it.

This was not, however, a joint project from the beginning. Don Rutherford began the work but, realizing the size of the task, asked Brandon Look to join him as a partner. Like Leibniz and Des Bosses themselves, we have been correspondents for ten years now, asking and answering questions, exchanging drafts of translations, and gently prodding each other along the way.

It has been our intention to produce a work that will satisfy two goals: to provide English-speaking students, philosophers, and historians of philosophy with a detailed and historically informed picture of the Leibniz–Des Bosses correspondence; and to provide Leibniz scholars with a dependable and useful resource for further work. This edition presents translations of 71 of the 138 letters exchanged between Leibniz and Des Bosses—those that we take to be of the greatest philosophical and historical importance. On the basis of our study of this material, we believe that we have made significant progress in understanding the central philosophical issues discussed in the correspondence—especially the status of the notorious hypothesis of the *vinculum substantiale*—and that as a result we have been able to formulate a fuller and more satisfactory interpretation of the final form of Leibniz’s philosophy than has previously been available. These conclusions are presented in our introduction.

For the benefit of Leibniz scholars, this edition also includes a new, critical, original-language text. Unlike previous volumes in the Yale Leibniz series, which could adopt the Akademie edition text, the Latin presented

on the left-hand pages was generated by our careful examination of the original manuscripts or copies thereof. Although we have not included the kind of scholarly apparatus that appears in the Akademie edition, we are confident that the original-language text meets a high standard of accuracy. Moreover, whenever Leibniz's drafts and marginalia shed light on the historical and philosophical issues at hand, they have been included with the original-language texts and translated.

This project has occupied us for many years now, and we have incurred debts of gratitude to a large number of people along the way. We wish to thank, first, the series editors, Dan Garber and Bob Sleigh, for their advice and encouragement. We are also grateful to our editors at Yale University Press—John Kulka, Susan Laity, and Ann Hawthorne—for their helpful replies to our queries and their careful attention to detail. Our home institutions—the University of Kentucky, Emory University, and the University of California, San Diego—provided generous support, including sabbatical leaves and financial assistance for archival research. We must also acknowledge the help of the staff and scholars of the Leibniz-Archiv and the Niedersächsische Landesbibliothek (now happily renamed Gottfried Wilhelm Leibniz Bibliothek) in Hanover, Germany, who provided us with microfilm of the original manuscripts of Leibniz and Des Bosses. Similarly, thanks are due to the staffs of the Bibliothèque Nationale, Paris, who made available microfilm of Leibniz's letters; the British Library, London, who provided helpful information regarding their holdings of Leibniz manuscripts; and the Houghton Library, Harvard University, who provided us with a photocopy of the one letter from the correspondence in their collection. We also give special thanks to Damian Konkoly, who originally brought the presence of this letter to our attention.

Early on we benefited from the support and inspiration of Reinhard Finster and the assistance of William Seager, who supplied us with scanned files of Gerhardt's edition of the correspondence. Near the end of the project, we received invaluable assistance from Paul Lodge, who carefully read through our translation and provided many helpful suggestions; and from Richard Arthur, who reviewed the text and translation for Yale and offered many useful comments that improved the final work. We are grateful to a number of colleagues who were able to lend us their expertise in matters of translation: Terry Tunberg, Jennifer Tunberg, and J. Francis at the University of Kentucky; and Steven Strange and Garth Tissol at Emory University. Other colleagues have been generous with advice on scholarly questions and in sharing their own work with us: Georgios

Anagnostopoulos, Sven Knebel, Michael Murray, Franklin Perkins. For their helpful comments on a draft of the introduction, we thank Maria Rosa Antognazza, Richard Arthur, Domenico Bertoloni Meli, Paul Lodge, and Michael Murray.

Finally, we owe our greatest thanks to Ingrid Marchlewitz Look and Madeleine Picciotto for their love, patience, and constant support in helping to bring this work to completion.

Abbreviations

- A** = *Gottfried Wilhelm Leibniz: Sämtliche Schriften und Briefe*, ed. Deutsche Akademie der Wissenschaften (Darmstadt and Berlin: Akademie Verlag, 1923–). Cited by series, volume, and page, e.g., A VI.ii: 229, or series, volume, and piece number, e.g., A II.i N68, or both, A II.i N60: 504.
- AG** = *Leibniz: Philosophical Essays*, ed. and trans. Roger Ariew and Daniel Garber (Indianapolis: Hackett, 1989).
- AT** = *Oeuvres de Descartes*, 12 vols., Nouvelle présentation, ed. Ch. Adam and P. Tannery (Paris: Vrin, 1964–76). Cited by volume and page, e.g., AT VIII.1, 71.
- BA** = *The Complete Works of Aristotle*, 2 vols., Revised Oxford translation, ed. Jonathan Barnes (Princeton: Princeton University Press, 1984).
- C** = *Opuscles et fragments inédits de Leibniz*, ed. Louis Couturat (Paris: Alcan, 1903; reprint ed. Hildesheim: Olms, 1966).
- CSM** = *The Philosophical Writings of Descartes*, 2 vols., ed. and trans. John Cottingham, Robert Stoothof, and Dugald Murdoch (Cambridge: Cambridge University Press, 1985). Cited by volume and page, e.g., CSM.i.235.
- D** = *Gothofredi Guillelmi Leibnitii Opera Omnia*, 6 vols., ed. L. Dutens (Geneva: De Tournes, 1768; reprint ed. Hildesheim: Olms, 1989). Cited by volume, part, and page, e.g., D II.1, 33.
- DSR** = *G. W. Leibniz, De Summa Rerum: Metaphysical Papers and Letters, 1675–1676*, ed. and trans. G. H. R. Parkinson (New Haven: Yale University Press, 1992).
- G** = *Die philosophische Schriften von Gottfried Wilhelm Leibniz*, 7 vols., ed. C. I. Gerhardt (Berlin: Weidmann, 1875–90; reprint ed. Hildesheim: Olms, 1960). Cited by volume and page, e.g., G.vi.264.
- GM** = *Leibnizens Mathematische Schriften*, ed. C. I. Gerhardt, 7 vols. (Berlin and Halle: Asher and Schmidt, 1849–63; reprint ed. Hildesheim: Olms, 1971). Cited by volume and page, e.g., GM.ii.231.
- Grua** = *Textes inédits d'après les manuscrits de la bibliothèque de Hanovre*, 2 vols., ed. Gaston Grua (Paris: Presses Universitaires de France, 1948; reprint ed. New York: Garland, 1985).
- Huggard** = *Gottfried Wilhelm Leibniz, Theodicy*, ed. Austin Farrar, trans. E. M. Huggard (La Salle, Ill.: Open Court, 1985).
- K** = *Die Werke von Leibniz. Reihe 1: Historisch-politische und*

staatswissenschaftliche Schriften, 12 vols., ed. Onno Klopp (Hanover: Klindworth, 1864–84). Cited by volume and page, e.g., K.iii.134.

L = *Gottfried Wilhelm Leibniz: Philosophical Papers and Letters*, 2d ed., ed. and trans. Leroy Loemker (Dordrecht: D. Reidel, 1969).

LA = *The Leibniz-Arnould Correspondence*, ed. and trans. H. T. Mason (1967; reprint ed. New York: Garland, 1985).

LBr = *Leibniz Briefwechsel* (manuscripts): Niedersächsische Landesbibliothek, Hanover; as catalogued in Eduard Bodemann, *Der Briefwechsel des Gottfried Wilhelm Leibniz* (Hanover, 1889; reprint ed. Hildesheim: Olms, 1966). Cited by file and sheet (Blatt) number, e.g., LBr 95, Bl. 35.

LH = *Leibniz Handschriften* (manuscripts): Niedersächsische Landesbibliothek, Hanover; as catalogued in Eduard Bodemann, *Die Leibniz-Handschriften der Königlichen öffentlichen Bibliothek zu Hannover* (Hanover, 1895; reprint ed. Hildesheim: Olms, 1966).

LOC = *G. W. Leibniz, The Labyrinth of the Continuum: Writings on the Continuum Problem, 1672–1686*, ed. and trans. Richard T. W. Arthur (New Haven: Yale University Press, 2001).

NE = *Gottfried Wilhelm Leibniz: New Essays on Human Understanding*, ed. and trans. Peter Remnant and Jonathan Bennett (Cambridge: Cambridge University Press, 1981).

OCM = *Oeuvres complètes de Malebranche*, 20 vols., ed. André Robinet (Paris: Vrin, 1958–68). Cited by volume and page, e.g., OCM.iv.231.

PW = *Gottfried Wilhelm Leibniz: Philosophical Writings*, ed. G. H. R. Parkinson, trans. Mary Morris and G. H. R. Parkinson (London: J. M. Dent & Sons, 1973).

Ve = *Gottfried Wilhelm Leibniz: Vorausedition zur Reihe VI—Philosophische Schriften*, in der Ausgabe der Akademie der DDR (Münster: Leibniz Forschungsstelle, 1982–), 10 fascicles. This was a preliminary edition for the use of scholars. Most of the texts appearing in Ve have since been published in A VI.iv.

A Note on the Texts and Translation

There are two main manuscript sources for the Leibniz–Des Bosses correspondence. In the Bibliothèque Nationale in Paris (BN Fonds Latin 10355), there are preserved sixty-two of Leibniz’s letters as they were received by Des Bosses. In the Niedersächsische Landesbibliothek in Hanover there is a file (LBr 95) of 230 pages, containing all but one of Des Bosses’s letters that are known to have been received by Leibniz, additional manuscript material conveyed with Des Bosses’s letters, and a large collection of manuscripts relating to Leibniz’s side of the correspondence (everything from preliminary drafts to clean copies corrected in Leibniz’s hand, plus a variety of notes and studies associated with the correspondence). Several other letters are held elsewhere: one of Des Bosses’s is in Leipzig, one of Leibniz’s in Halle, one at Harvard, and two in the British Library.

The earliest edition of the correspondence was prepared by Ludovic Dutens in 1768 (see D II.1, 265–323; VI.1, 173–201). Ravier (1937) indicates two earlier works (entries 334 and 411) that contain three of Leibniz’s letters to Des Bosses. Dutens reports having received seventy-five of Leibniz’s letters from the library of the Collège Clermont in Paris, where they had been deposited after Des Bosses’s death. Dutens published seventy of these letters, which were partly in the form of originals received by Des Bosses and partly copies (see D II.1, 265). These comprise the letters preserved in the Bibliothèque Nationale (sixty-two letters), the British Library (two), Harvard’s Houghton Library (one), and the Halle University Library (one). To date four of the letters published by Dutens remain unaccounted for. These are now known only through their published texts. A complete catalogue of the correspondence appears as an appendix to this volume.

The present standard edition of the correspondence appears in volume 2 of C. I. Gerhardt’s *Die philosophischen Schriften von Gottfried Wilhelm Leibniz* (G). Gerhardt prints seventy-one of Leibniz’s letters (including one missing from the Dutens edition that is known only through Leibniz’s draft) and fifty-seven of Des Bosses’s letters (there published for the first time). It is clear that Gerhardt did not have access to the manuscripts from which Dutens worked. He reports being forced to reprint thirty-six of Leibniz’s letters from Dutens’s edition because the originals were missing. Variations between the texts indicate that in the case of the other thirty-four letters common to the two editions, Gerhardt relied on copies or drafts of Leibniz’s letters preserved in Hanover rather than on Dutens’s text (the one based on the letters received by Des Bosses). The result is an

edition of uneven quality. Often it presents the wording of drafts of Leibniz's letters rather than the versions received by Des Bosses. Moreover, Gerhardt makes no effort to indicate systematically any additions or deletions in Leibniz's text and exercises considerable license in altering the punctuation of the Latin text.

The most extensive translation of the correspondence is the French edition of Frémont (1981, 1999). Frémont translates thirty-seven of Leibniz's letters as they are found in the Gerhardt edition. The largest collection of letters translated into English is found in Loemker's edition (L). Loemker provides partial translations of twelve of Leibniz's letters and four of Des Bosses's. One further letter and a supplement to a letter have been published in English by Ariew and Garber (AG).

To date there exists no complete, critical edition of the Leibniz–Des Bosses correspondence. One will appear ultimately as part of Reihe II of the Deutsche Akademie edition of Leibniz's writings, which is being prepared at the Leibniz-Forschungsstelle, Münster. However, no date has been set for the completion of this task. Our edition of the Latin text of the correspondence does not aspire to the comprehensiveness of the Akademie edition. Space constraints have limited us to the publication of 71 (32 from Des Bosses and 39 from Leibniz) of the 138 letters that are known to make up the correspondence. Although this may seem a relatively modest proportion, we have endeavored to include all the letters with significant philosophical content and most of those with significant theological content. Many that remain are no more than brief notes, which indicate, for example, a change in travel plans or transmit a letter from a third party. In our selection of letters we have also, so far as is possible, attempted to preserve the flow of the correspondence, matching query with response, so as to facilitate an understanding of the sustained philosophical debate in which the two correspondents were engaged.

Although our edition falls short of the aims of the Akademie edition, we have endeavored to produce a Latin text that is a significant improvement on those published by Dutens and Gerhardt. It is based on a careful study of copies of all the available manuscript material. In general, we have adopted the following editorial principles. Our printed text reproduces letters in their entirety and follows the wording, punctuation, and orthography of the documents dispatched by the two correspondents. Accordingly, we have given priority to the Paris manuscripts in the case of Leibniz's letters and to the Hanover manuscripts in the case of Des Bosses's. In the case of Leibniz's letters, we have collated the sent versions with the drafts and copies preserved in Hanover and noted any significant variations be-

tween them. For two letters, this has meant publishing both the sent version of the letter and a draft. We have also noted numerous additions and deletions in the sent versions of letters and drafts, wherever they have seemed to be of philosophical interest. Minor variants are included in the endnotes to the English translation. More extensive alterations are presented in Latin and English as footnotes to the body of the text. These are indicated by a superscript “L” (or in one case “DB”) followed by sequential numerals. Within these footnotes, | vertical lines | are used to delimit text that appears differently, or has been added or deleted, in drafts of letters. In one instance we have also used vertical lines in the body of the text to indicate that a passage has been crossed through by Leibniz. Interpolations in the text are [enclosed within square brackets]. Conjectural readings of the text where it is broken off or illegible are <enclosed within angle brackets>. Throughout we have exercised discretion in tracking the differences between draft and sent versions of Leibniz’s letters. In contrast to the approach adopted in the Akademie edition, we have not attempted to reproduce every nuance of the manuscripts or their compositional history. Our goal has been limited to producing an edition that has a solid footing in manuscript sources and is as accurate as possible in its presentation of the final text of the letters.

In preparing our edition we have been fortunate to have before us the admirable model of Richard Arthur’s contribution to the Yale Leibniz series. Our translation follows the principles laid out by Arthur (LOC xi, xxi–xxii). We have not prepared a glossary. Difficult terms occasionally receive comment in editorial notes; otherwise readers are encouraged to consult Arthur’s valuable Latin-English and English-Latin glossaries. All editorial notes are indicated by superscript Arabic numerals in the English text only and appear as endnotes. In their letters, Leibniz and Des Bosses generally mark off quoted material with underlining (signaled by italics in our Latin text); in the translation such passages are indicated in the standard way with “quotation marks.”

In the Introduction and in the notes to individual letters, “Letter [X]” refers to the selection number in this Yale volume. Letters from the correspondence not included in this volume (catalogued in the appendix) are cited by date. All dates conform with the Gregorian calendar then in use in Roman Catholic countries and (from 1700) in Protestant Germany.

Introduction

Leibniz's decade-long correspondence (1706–16) with the Jesuit theologian Bartholomew Des Bosses is one of the high points of his philosophical career. It is also his longest philosophical correspondence, with more than 130 letters exchanged between the two men. As in his earlier correspondences with Antoine Arnauld (1686–90) and Burcher de Volder (1698–1706), it finds Leibniz engaged in a sustained effort to clarify and defend key points of his philosophy against the probing of an intelligent and determined critic. The Des Bosses correspondence is all the more valuable for the fact that it occurred during the last decade of Leibniz's life, when his philosophical views had reached their final development. Within this period was written the famous "Monadology," as well as the *Essays on Theodicy*, which Des Bosses translated into Latin under Leibniz's supervision.

The Des Bosses correspondence covers a wide range of philosophical, theological, and literary topics. Best known is the sustained discussion of the Catholic dogma of transubstantiation—a key concern for both the Jesuit Des Bosses and the irenically minded Leibniz. As it is dealt with in the correspondence, the topic of transubstantiation merges with one of the most serious points of tension in Leibniz's metaphysics: the status of "corporeal substances"—living creatures composed of an organic body and an immaterial soul or form. Although there is much to be said for regarding such creatures as substances, Leibniz's theory of monads supports the conclusion that corporeal things in general are "phenomena," which lack the full reality of substances. Spurred by Des Bosses's questioning, Leibniz is forced to reconsider this view. The result is his introduction of the hypothesis of a "substantial bond" (*vinculum substantiale*),¹ an entity with the capacity to unite a plurality of monads in a single composite substance. Although Leibniz appears ultimately to reject the addition of this hypothesis to his system, his careful treatment of what such an entity would entail throws considerable light on his deepest ontological principles.

The Des Bosses correspondence illuminates Leibniz's views on numerous other topics: the nature of monads, the origin of rational souls, the analysis of the infinite, the compatibility of freedom and determination, and the doctrine of theodicy. The correspondence also provides glimpses of Leibniz's many and varied activities during the final decade of his life, and of his reactions to contemporary books and events. Finally, and most intriguingly, the letters offer insight into Leibniz's broader conception of philosophy: his attitude toward philosophical debate, his expectations of Des Bosses as a student and expositor of his philosophy, and his overarch-

ing concern for intellectual and religious accord. Approaching the correspondence as a whole, one comes away with a much richer understanding of Leibniz's view of the aims of philosophy and of its relation to religion and practical affairs.

1. Background

We do not know when Leibniz first met Bartholomew Des Bosses. Their correspondence was initiated by a letter from Des Bosses dated 25 January 1706. It alludes to a brief meeting between the two sometime in the recent past. In a letter to Giovanni Battista Tolomei of 17 December 1705, Leibniz reports having received a copy of one of Tolomei's books from Des Bosses. Presumably he did so on the occasion of their first meeting, which thus was likely during the first half of December, either in the town of Hildesheim (less than a day's ride from Hanover), where Des Bosses resided and where Leibniz had many contacts, or, more likely, in Hanover, where Des Bosses may have traveled with the intention of delivering Tolomei's book and making Leibniz's acquaintance.

At the time of their meeting, Leibniz was fifty-nine years old and one of the leading intellectual figures in Europe. His reputation was secure as the most distinguished mathematician on the continent, and through his publications and correspondence he was known to all the major philosophers, theologians, scientists, and political leaders of the period. The contrast with Bartholomew Des Bosses could not have been greater. Born in 1663 in Herve, near Liège in what is now Belgium, Des Bosses entered the Society of Jesus in 1686. By 1700 he was teaching at the Jesuit college in Emmerich. Some time thereafter he moved to Hildesheim, where he met Leibniz and remained until 1710, when he was appointed a professor of mathematics (and later moral philosophy) at the Jesuit college in Cologne. Apart from a stay in Paderborn in 1712 and 1713, he remained in Cologne until his death in 1738.²

From the beginning of their correspondence, Des Bosses made a strong case for attracting Leibniz's attention. Going beyond conventional flattery, Des Bosses proposed to Leibniz an intellectual project that was close to the older man's heart and whose pursuit would inevitably raise a host of important questions about Leibniz's metaphysics. As Des Bosses described the project in his first letter, his plan was to "accommodate the substance of [Leibniz's ideas] with the doctrines of Aristotle, or rather, accommodate the former with the latter and both with the dogmas of the Church." The ultimate goal would be a systematic presentation of Leibniz's philosophy reconciled with that of Aristotle and Catholic theology.³

This was a goal similar to one Leibniz had pursued for many years, so he was understandably supportive of Des Bosses's plan.⁴ Over several years, he encouraged Des Bosses in its pursuit, but in the end Des Bosses was unsuccessful in bringing the project to fruition. Like Leibniz, he complained of the many demands on his time that prevented him from concentrating on his philosophical labor, and as late as 1735, nineteen years after Leibniz's death, he still spoke of it as a work in progress.⁵

Although the outcome of the correspondence was not the grand synthesis of which Des Bosses had dreamed, it was nonetheless a productive engagement for both parties. The endurance of the correspondence for over a decade is evidence of the positive qualities Des Bosses brought to the exchange: his intellectual energy, his wide range of information about matters relating to the Jesuits, and his ability both to challenge Leibniz constructively on key points and to accept gracefully Leibniz's occasional sharp retorts and critical assessments of positions adopted by the Jesuits. Add to this Des Bosses's success as the Latin translator of the *Theodicy* and as an intermediary between Leibniz and the Jesuit intellectual establishment, and one can understand why his letters continued to attract Leibniz's attention year after year.

2. The Role of Correspondences

Leibniz's exchange with Des Bosses is but one example of the many philosophical correspondences he conducted over the course of his life—correspondences that contributed vitally to the development and dissemination of his views.⁶ Within the Des Bosses correspondence itself, numerous passages reinforce the significance of such exchanges for Leibniz. During Leibniz's lifetime, learned journals had come to play an increasingly important role in the intellectual life of Europe. Leibniz published widely in these journals on topics in mathematics, natural science, and philosophy and was a strong supporter of them as venues for furthering the advance of knowledge. However, like many figures of the period, Leibniz was cautious about the publication of his views, especially in philosophy and theology, where unconventional opinions were apt to incite intemperate reactions, and where the confrontation between inadequately defined and defended positions frequently generated more heat than light. Leibniz believed that, ideally, the truths of philosophy could be demonstrated with the same rigor as those of mathematics, and a significant portion of his early career had been devoted to a scheme (the *scientia generalis*) in which philosophical arguments would be reduced to formal proofs that would allow no room for quibbling or prolonged disagreement. As Leib-

niz's career progressed, the distance between this methodological ideal and his philosophical practice grew. He continued to hope that his philosophy could one day be presented in a demonstrative form, but he came to accept that that day was a long way off—in part because he lacked the means to express the relevant propositions in a suitable symbolism, in part because, as he himself admitted, he had yet to unite his views in a complete philosophical system.⁷

In the absence of such a system it was open to Leibniz to present his ideas partially and tentatively in learned journals—a course he sometimes adopted, especially when responding to the published views of others. However, Leibniz preferred to pursue philosophical debate privately through the questions and objections of select correspondents. It was in this way that much of his most penetrating philosophy was written, beginning with his landmark exchange with Arnauld during the late 1680s. Accordingly, although Des Bosses had held out the prospect of a systematic presentation of Leibniz's thought, there is no reason to suppose that Leibniz saw the correspondence as hinging on this outcome, or that he counted on Des Bosses to succeed in an endeavor in which he himself had failed. What attracted Leibniz most strongly was the way in which Des Bosses's questions pushed him to examine vulnerable points in his philosophy and to consider more fully its relationship to Catholic theology.⁸ On the latter point in particular Leibniz stressed to Des Bosses that their exchange was a private one—an airing of ideas that were not yet ready to be presented to the public, where they would be open to misinterpretation: "I do not think those things we have discussed in letters concerning philosophical matters are suited for communication in any sort of public way, for they are unorganized and not gathered together in a system, such as I was hoping for from you. I have written these things for you, namely for the wise, not for any one at all; thus, they are hardly appropriate for the *Mémoires de Trévoux*, which is intended more for a popular audience. I hope that you, by virtue of your goodwill toward me, would not allow them to appear in such an unsuitable place."⁹

Correspondences provided Leibniz with a space in which intellectual exchange could proceed in an open and unfettered fashion. His letters became laboratories in which ideas could be tried out, challenges met with new speculations. The price of this openness—evidence of Leibniz's lack of dogmatism in philosophy—is that a certain indeterminacy enters the expression of his views. What he writes to a given correspondent is inevitably conditioned by the circumstances of the exchange, the priorities of his interlocutor, and the particular problem being addressed. More than

this, just as Leibniz draws a distinction between public and private presentations of his views, so he recognizes differences among his correspondents based on how close they come to embodying the virtues of “the wise.” It is safe to say that Leibniz speaks his mind openly in the correspondence with Des Bosses and that his private opinion of the Jesuit agreed with what he says of him in the *Theodicy*: “he has combined rare erudition with great acumen, which he displays in philosophy and theology.”¹⁰ We can thus be confident that what we find in the correspondence are Leibniz’s honest efforts to confront the problems Des Bosses raises and to reconcile his philosophy with the teachings of the Roman Catholic church. Leibniz’s willingness to take up the latter challenge, an anomaly for a professed Lutheran, brings us to the correspondence’s center of gravity and the context in which his treatment of more specific philosophical issues must be addressed.

3. The Search for Accord

Although Leibniz was wary of the controversy that his more radical views might spark, he did not experience the immediate threats to his person that a Bruno, a Galileo, or a Spinoza faced. Safe in Protestant Germany, Leibniz could have published his views in a dogmatic and partisan way. That he did not was the product of his lifelong commitment to discovering and promoting the harmony he believed to underlie both nature and human affairs. In a Europe racked by war and religious discord, this activity had an immediate practical end. Throughout his career, Leibniz was a forceful proponent of peace, enlightened government, and religious reconciliation as means to achieving the greatest human happiness. The reunion of the Catholic and Protestant churches was his most ambitious goal; and, when this failed, he fell back on the more limited objective of peaceful coexistence with the Catholic church and communion among the various Protestant denominations.¹¹

Leibniz’s conciliatory ideals, however, reached beyond practical matters. They also informed his conception of intellectual inquiry and his view of what philosophers can, and should, hope to achieve. A constant refrain in his writings condemns the spirit of sectarianism—the dangers inherent in pitting one side against another—whether in religion or in philosophy.¹² In contrast to Bacon, Hobbes, and Descartes, who wrote as the fomenters of an intellectual revolution and forcefully defended the correctness of their vision of the new philosophy, Leibniz was the advocate of constructive engagement and gradual change. As he tells Des Bosses in Letter 2, “in general, I have always felt it preferable to reform received

opinions than to overthrow them. For this reason, I have produced the conciliatory meditations that you in your kindness praise so highly.” Underlying this openness to the views of others, and willingness to accommodate their positions to his own, is Leibniz’s conviction that a single truth underlies all philosophical inquiry, a truth that has been partially and confusedly perceived by those who have searched for it. As a result there is a unity to the history of philosophy: it is evidence of a “certain perennial philosophy [*perennis quaedam philosophia*],” which Leibniz aims to recover from the disparate and often contradictory opinions of previous philosophers.¹³ Thus, he sees his primary challenge as that of overcoming intellectual differences rather than establishing the exclusive rightness of one position over another. Natural philosophy is not restricted to a choice between Aristotelian and mechanistic forms of explanation; from his university days, Leibniz saw the truth as embracing aspects of both points of view. Likewise different denominations can be seen as expressing the central teachings of Christianity in different ways; and at least part of the same doctrine can be found in the moral philosophy of the ancient Greeks and the natural theology of the Chinese.

Presented in these terms, Leibniz’s philosophy might seem destined to end up an incoherent eclecticism. Yet this is far from the case. Neither his conciliatory rhetoric, nor his belief that progress often comes through the synthesis of *prima facie* opposing positions, serves to weaken Leibniz’s commitment to a determinate truth. A well-defined set of theoretical principles provides the foundation for his own philosophy; and he makes it clear that certain views—those of Hobbes and Spinoza, for example—are mistaken at such a fundamental level that it is impossible to accommodate them within his system.¹⁴ Nevertheless, in most cases Leibniz prefers to stress points of agreement over points of disagreement. Opposed thinkers are working toward the same end, the discovery of a common truth, and for this reason the collaborative method of the natural sciences (instituted in the nascent scientific societies of London, Paris, and Berlin) provides a better model for philosophy than does the medieval disputation.

A critic might still object that in his eagerness to find agreement Leibniz risks glossing over equally significant differences. It is simply not true, the critic contends, that most theological, metaphysical, or moral views can be reconciled, so Leibniz is at best naïve and at worst duplicitous if he represents himself as thinking that they can be. This charge should not be dismissed too quickly. Throughout his writings, Leibniz defends the importance of preserving ordinary ways of speaking, while also distinguishing sharply between what is said loosely or vulgarly and what holds “in meta-

physical rigor.” In Letter 4 he tells Des Bosses, “I do not think we should depart from customary ways of speaking, which are related to appearances in much the same way as Copernicans speak with the vulgar about the motion of the sun. We speak in a similar way about chance and destiny.”¹⁵ Reserving the right to interpret words in a sense different from what their speakers intend, Leibniz may have no trouble establishing agreement between opposing positions.¹⁶ But the cost of doing so is to devalue the intellectual harmony he prizes and to raise questions about the sincerity of his own assertions. When a Copernican speaks with the vulgar about the motion of the sun, she is not accepting that the vulgar have equal claim to the truth about the sun’s motion; she is merely accepting that this is a convenient way of talking, one that accords with the sun’s apparent motion. If this is how Leibniz understands the agreement between conflicting philosophical or theological views (particularly ones that conflict with his own position), then there is reason to question the significance of the agreement he claims to find. In such cases, the appearance of agreement may mask substantive disagreement. Furthermore, if Leibniz is willing to affirm the assertions of opposing thinkers on the condition that their words *can* be given a proper interpretation, then it may be difficult to discern when he is speaking in his own voice, asserting what he takes to be the truth “in metaphysical rigor,” and when he is merely paying lip service to the popularly expressed views of others. Later, we will encounter specific cases in which such concerns can be raised.

To raise such concerns is not to move for Leibniz’s immediate conviction on the charge of insincerity. It does, though, highlight some of the difficult questions posed by his method. Is it reasonable to suppose that the same truth can be expressed in both “metaphysically rigorous” and “popular” ways? If so, are there clear criteria by which we can decide when two positions are saying the same thing and when they are not? In adjudicating the agreement or disagreement between two positions, is one warranted in drawing a distinction between nonnegotiable doctrinal commitments and views about which there can be ineliminable yet “reasonable” disagreement between parties? Such questions have been part and parcel of theological debate for centuries. Yet they are not questions that Leibniz poses directly of his own philosophical practice, however relevant they may be.¹⁷

4. Leibniz and the Jesuits: China and the Universal Church

Leibniz’s engagement with members of the Society of Jesus dates to the earliest part of his career. It reflects both the central place of Jesuits in the

intellectual life of early modern Europe and their contributions through their missionary activity to the diffusion of learning and science. For these reasons Leibniz saw the Jesuits as the ideal propagators of his ambitious plan for a society devoted to the establishment of a “universal treasury” of knowledge.¹⁸ Leibniz’s personal contacts with Jesuits were extensive. Before Des Bosses, there were Honoré Fabri, Athanasius Kircher, and Giovanni Battista Tolomei—to mention only a few of the most notable figures. When Des Bosses came calling, therefore, it was natural that Leibniz should take an interest in the younger man, both because of his stated plan of unifying Leibniz’s philosophy with Catholic theology, and because of the access he offered to the latest news of the Jesuits’ activities around the world.

Throughout their correspondence, Leibniz is eager to learn whatever he can from Des Bosses about the affairs of the Jesuits. He is especially keen to gather intelligence about two ongoing crises in the Catholic church in which the Jesuits played a leading role: the so-called Rites Controversy, which threatened to bring an end to the Church’s missions in China; and the protracted conflict between Roman Catholic authorities and members of the Jansenist movement.

The first of these crises connected closely with Leibniz’s long-standing interest in China. From the early 1670s, he had collected whatever information he could about China, much of it reported by Jesuit missionaries who had arrived there in the 1580s, led by Matteo Ricci (1552–1610). Leibniz regarded China as a highly developed culture from which Europe had much to learn. He was fascinated by the Chinese language, which he sometimes cited as a model for his universal characteristic, and by the parallels between Chinese and European philosophical thought.¹⁹

Leibniz’s knowledge of contemporary events in China received an important boost in 1689, when he made the acquaintance of the Jesuit Claudio Filippo Grimaldi in Rome.²⁰ Thereafter he corresponded extensively with Grimaldi and other Jesuits associated with the China mission. The most significant product of these exchanges was the publication in 1697 of the *Novissima Sinica* (The Latest News from China), a collection of Jesuit reports on China which Leibniz edited. The preface that Leibniz wrote for the volume makes clear his admiration for Chinese society: “If we are their equals in the industrial arts, and ahead of them in contemplative sciences, certainly they surpass us (though it is almost shameful to confess this) in practical philosophy, that is, in the precepts of ethics and politics adapted to the present life and use of mortals. Indeed, it is difficult to describe how beautifully all the laws of the Chinese, in contrast to those of other peoples, are directed to the achievement of public tranquility and the estab-

lishment of social order, so that men shall be disrupted in their relations as little as possible.”²¹

By the time of his correspondence with Des Bosses, Leibniz was a recognized authority on China. Whether or not his opinion was valued by Vatican decision makers, as Des Bosses suggests in Letter 28, Leibniz closely followed the unfolding drama of the Rites Controversy. The crux of the controversy concerned the extent to which the Jesuits’ promotion of the Christian faith in China was consistent with the preservation of the traditional beliefs and customs of the Chinese. Many Jesuits accepted the view of Matteo Ricci that the rites carried out by the Chinese in honor of their ancestors and Confucius were civil in nature and could be accommodated within Christianity. Their critics, who included rival Franciscan and Dominican missionaries and much of the Catholic hierarchy, rejected this position, deeming the “cults” superstitious and idolatrous. From the outset, the issue was bound up with larger political questions: struggles for dominance among different factions within the Catholic church, and among different national interests vying for influence in southeast Asia.²²

Leibniz was a strong supporter of the accommodationists’ position. To Des Bosses he sharply criticizes the pope’s failure to take a decisive stand on the issue, and predicts the end of the Jesuits’ mission if the pope should command Chinese Christians to abstain from the customary honors shown to Confucius and their ancestors (Letter 44). At the same time, Leibniz’s own position went beyond anything envisioned by the accommodationists. Where they sought a peaceful coexistence between Christianity and Chinese cultural practices, Leibniz aimed to expose a more fundamental harmony between Christian beliefs and what he describes as the natural theology of the Chinese. In a Latin essay sent to Des Bosses in 1709, he makes the case for the presence of the concepts of God and an immaterial soul in Chinese thought, and suggests that “their most venerable precepts of life hold out the strong hope of actually [being] doctrines of a religion of salvation.”²³ These themes are pursued at greater length in the *Discourse on the Natural Theology of the Chinese*, a work that remained unfinished at his death. Summarizing its contents for Des Bosses in Letter 70, he writes: “In it I consider the Chinese doctrines concerning God, spirits, and the human soul; and I use those very authorities whom Niccolò Longobardi of your order and Antonio de Santa Maria, a Franciscan, adduced in order to prove the Chinese, as well as the ancients, guilty of atheism. They were so far from succeeding in this that, instead, all the contrary propositions seem to me most probable. In fact, the ancient Chinese more than the philosophers of Greece seem to have come near to the truth.”

Leibniz’s praise for the insights and piety of the ancient Chinese is an

anomaly in seventeenth-century Europe. His willingness to ascribe to them, however tentatively, a “religion of salvation,” despite their lack of any acquaintance with Christianity, brings to the fore a theological question long debated within the Catholic church: are those who, through no fault of their own, die without knowledge of God and a redeeming faith in Christ excluded from salvation? In Letter 23 Leibniz acknowledges that the virtuous actions of a pagan, while formally indistinguishable from those of a pious Christian, are in some measure blameworthy, because the pagan lacks the “virtual intention” to direct all her actions toward the highest good, that is, God. In this connection, though, Leibniz places his greatest emphasis on the acceptance of a natural theology that includes belief in a just creator who embodies the perfections of goodness and wisdom, and belief in the existence of an immortal soul, which is a prerequisite for the exercise of divine justice. In other writings, he argues that the knowledge and love of God are sufficient for the attainment of the highest happiness, or blessedness, which presumably would be accessible to the Chinese, if their teachings included the right sort of natural theology.²⁴

But would this blessedness amount to salvation, as a Christian understands it? In the *Theodicy*, a work written during his correspondence with Des Bosses, Leibniz appears to assert that it would, and he offers this as a position acceptable to the Catholic church: “sundry theologians of great authority in the Roman Church itself have taught that a sincere act of the love of God above all things, when the grace of Jesus Christ arouses it, suffices for salvation” (G.vi.156/Huggard 176). Leibniz maintains that, when prompted by the grace of Jesus Christ, the love of God is sufficient for salvation; and he is flexible about the conditions under which this grace is offered. The way he chooses to frame his position is revealing: “Supposing that today a knowledge of Jesus Christ according to the flesh is absolutely necessary for salvation, as indeed it is safest to teach,” nonetheless it is possible for God to give this knowledge in different ways, including the enlightenment of unbelievers at the moment of death. “Thus, there are countless paths open to God, giving him means of satisfying his justice and goodness: and the only thing one may allege against this is that we know not what way he employs” (G.vi.157/Huggard 177). According to Leibniz, there is no necessity that a person possessed by a genuine love of God actually recognize Jesus Christ as the source of the grace needed to sustain that love. Thus, there is no reason to reject out of hand the idea that the ancient Chinese possessed a “religion of salvation.”²⁵

In *Theodicy*, §96, Leibniz ascribes to the German Jesuit Friedrich Spee (1591–1635) the teaching that human beings are justified, or removed

from a condition of sin, through divine love alone, “even without the intervention of the sacraments of the Catholic church, provided one does not scorn them” (G.vi.156/Huggard 176).²⁶ Aided by grace, we attain through divine love the condition of perfect charity, wherein we replicate God’s goodness in all our actions, and this perfect charity is sufficient for salvation. In Letter 41, Des Bosses takes issue with this section of the *Theodicy*. He agrees that it is an accepted Jesuit teaching that perfect charity is sufficient for salvation. However, he denies that it follows that those who are outside the communion of the Catholic church can attain salvation, for such individuals (he claims) cannot exhibit perfect charity as long as they are separated from the Church.²⁷

Leibniz’s response is unyielding: “whether anyone outside your church can have true charity is a question of fact, which is presumed to be possible until the contrary is proved” (Letter 42). As we will see in the next section, Leibniz grants the infallibility of the Catholic church on questions relating to salvation, but not its infallibility on questions of fact. While the proposition that perfect charity is sufficient for salvation may fall under the former heading, the claim that any given individual exhibits such charity does not. Thus, there is no basis for the assertion that membership in the Roman Catholic church is necessary for salvation. In writings outside the correspondence, Leibniz sometimes entertains the more radical thought that the true Catholic, or universal, church may not be coextensive with the Roman Catholic church at all. If, as he believes, the communion of the true Catholic church is defined by the virtue of charity, then it may be correct to say that perfect charity cannot be realized outside the confines of the Church. But in this case, there will be no reason to restrict the Church’s membership to Roman Catholics, or even to Christians.²⁸

On the issue of salvation, then, we find a familiar tension in Leibniz’s position: while he is concerned to reach agreement with Des Bosses on the fundamental tenets of Christianity, he reserves the right to redefine what those tenets mean “in metaphysical rigor.” On his account, nominal pagans such as the Chinese are capable of achieving salvation as members of the one universal Church, provided that they possess the correct natural theology.

5. Jansenism

During the first half of their correspondence, Des Bosses and Leibniz frequently exchange news and opinions concerning the Jansenist controversy. As a theological movement, Jansenism developed in two stages. The first was initiated by the posthumous publication in 1640 of the book

Augustinus, by Cornelius Jansen (1585–1638), bishop of Ypres, and was dominated by Arnauld, Pascal, and the members of Port-Royal. In *Augustinus*, Jansen argued against the predominant Jesuit teachings concerning grace and free will, and sought to restore to the Church the true doctrines of St. Augustine. According to Jansen, the views advanced by the Jesuits bordered on Pelagianism and should be rejected for the reasons educed by Augustine in his writings.²⁹

Central to Jansenism is the doctrine of “efficacious grace.” Jansen maintained that, before the Fall, Adam and Eve needed only the general grace of the creator in order to perform meritorious actions. In our present fallen state, more is required: an “efficacious grace,” earned for human beings by Jesus Christ, without which meritorious action is impossible. Distinctive about this grace is that it does not merely render meritorious action possible, leaving its choice to an agent’s free will. Rather, efficacious grace infallibly brings it about that an agent loves God and chooses to act in a meritorious manner—and does so freely.³⁰ Furthermore, according to Jansen, God has preordained who is to receive efficacious grace and who is not; that is, God has predestined an elect for salvation and the rest for eternal damnation.

Reaction to these doctrines was swift and harsh. In 1649 a committee of the Sorbonne singled out five propositions which they claimed to have found in *Augustinus* and which they censured as false, heretical, or contrary to scripture:

1. Some commandments of God are impossible for righteous men, although they wish to fulfill them and strive to fulfill them in accord with the power they presently possess. They lack the grace that would make it possible.
2. In the state of fallen nature, interior grace is never resisted.
3. In order to deserve merit or demerit in the state of fallen nature, freedom from necessity is not required in men; rather, freedom from constraint is sufficient.
4. The Semi-Pelagians admitted the necessity of prevenient and interior grace for each action, even for the beginning of faith; but they were heretics in that they held that this grace is such that the human will can either resist it or obey it.
5. It is an error of the Semi-Pelagians to say that Christ died or that he shed his blood for everyone without exception.³¹

While there was considerable dispute about whether these propositions were really to be found in Jansen’s work, Pope Innocent X took them to

represent Jansen's position and in the bull *Cum occasione* (1653) declared them unacceptable to the Catholic church.³² Thereafter members of the clergy were required to sign a pledge expressly rejecting the condemned propositions and acknowledging that they in fact were expressed in *Augustinus*. It was at this time that Arnauld was censured by the Sorbonne and banned from its faculty, leading to his departure for the Netherlands, where he remained in exile until his death in 1694.

The second wave of Jansenism followed on the publication in 1693 of Pasquier Quesnel's four-volume *Nouveau testament en français avec des réflexions morales sur chaque verset*, commonly known as the *Moral Reflections*.³³ In this work, Quesnel offered one of the first translations of the New Testament into French and presented a commentary on the text from a Jansenist perspective, further developing a theology based on the prayer "Da quod jubes."³⁴ Upon the appearance of the book, tensions rose again, and Quesnel was forced to flee France and settle in the Low Countries, where he resided for a short time with the aging Arnauld. In 1703 Quesnel was arrested in Brussels on the order of Philip V of Spain and held in the prison of the archbishop of Malines, Humbert-Guillaume de Précipiano; but he escaped and eventually found refuge in Amsterdam, a fact known to Leibniz (Letter 12). In the bull *Unigenitus* of 1713, Pope Clement XI condemned 101 propositions said to be found in the *Moral Reflections*.³⁵

For Leibniz, the Jansenist controversy raised a host of significant issues. In his letters to Des Bosses, he walks a fine line between appearing as a detached observer of an internecine conflict within the Catholic church and a theologian intent on defending his own positions on the central topics of grace and freedom. This duality is transparent in Letter 12 in a sentence he chose to delete from the version sent to Des Bosses: "For my own part, I must admit that I see no necessity for a grace efficacious in itself, but at the same time I also do not see what your order finds so reprehensible in Arnauld's doctrine, and so in my opinion authors on both sides are acting out a pointless tragedy." The second half of this sentence summarizes Leibniz's two principal criticisms of the way in which the controversy itself had been perpetuated. First, he assails both parties for their refusal to acknowledge freedom of thought and expression as fundamental values. He makes this case most forcefully in Letter 19:

what I find worst of all is persecution on account of opinions that do not encourage criminal acts, a practice from which honorable men should not only refrain, but which we should also abhor and work against so that others, over whom we have some authority, are dis-

couraged from it. It is permissible to deny honors and favors that are not owed to those who advance views that seem to us unfavorable; but I do not think it permissible to seize their property and, what is more, to threaten them with proscriptions, imprisonment, beatings, and still more serious evils. For what is this but a kind of violence, against which one cannot be secure except through a crime (by abjuring what one believes to be true)?

With respect to the Jansenists, he urges Des Bosses:

let them write, let them defend their opinions. Their errors should be overturned with equal arms, not by force and fear; no, on the contrary, let their errors stand: the evil in them is less than in the actions taken against them. In truth, they die much more readily from neglect than from suppression. There would be nothing today of what you call Jansenism if hostile men had not provoked an uproar against the work of Jansen, in which more attention was given to partisanship than to the truth.

But Leibniz finds the Jansenists no more tolerant of those with whom they disagree. In *Augustinus*, he says, it seems that

[Jansen's] plan had been not only to bring back the theological system of Augustine in the schools, which could not be faulted, but also to drive out opposing views, such as those of the Pelagians and Semi-Pelagians, of which I cannot approve. It is extremely harmful that freedom of thinking be restrained from day to day within unnecessary limits. Suppose there are points on which some Scholastics agree with the Pelagians; should they for that reason immediately be condemned? . . . Thus, my view is the following: if Jansen or the Jansenist party had achieved their goal, servitude would have become still more onerous, and one could justly fault in Jansen an ill-advised zeal to condemn others.

Leibniz's defense of what he earlier in Letter 19 calls the "freedom of philosophizing" draws further support from his second main criticism of the controversy, this one clearly directed at the pope's condemnation of the five heretical propositions discerned in *Augustinus*. Here the debate between the parties turned on whether these propositions were actually expressed in Jansen's work, and whether the church could pronounce infallibly on this issue as a "question of fact." In their defense, Jansenists appealed to a distinction between fact and right: the Church had a right to

judge whether the condemned propositions were contrary to dogma, but it was necessary to establish first that they in fact were contained in *Augustinus* and that the sense given to them was that intended by Jansen. On this point Leibniz is adamant: there is no basis for the assertion of the church's infallibility on questions of fact; infallibility can be claimed only with respect to articles of faith necessary for salvation.³⁶ Leibniz gives several reasons for adopting the principle of charity in interpreting Jansen's writings.³⁷ First, there is no way to tell definitively what an author has intended his words to mean. Jansen may well have been using key terms in a sense different from that understood by his critics. Second, in the case at hand, the most contentious terms—"possibility," "necessity," "freedom"—are often used in ways that fail to express well-defined philosophical concepts. Because of their confusion, the disputants may not clearly understand what they themselves are trying to say. For this reason, Leibniz believes, we are justified—and indeed obliged—to assign their words the best possible meaning, namely, that which maximizes the truth of their utterances.

On these grounds Leibniz is able to make the audacious suggestion that the bitter dispute between Jansenists and Jesuits over the freedom of the will ultimately comes to naught. If the position of each side were properly understood, we would see that there is no real disagreement between them. As he puts the point in *Theodicy*, §367: "confusion comes most often simply from the equivocation of terms and from the little care that is taken to make notions distinct. This gives rise to these eternal, and most often poorly understood, disputes over necessity and contingency, over the possible and the impossible. . . . I would not be surprised if at bottom the Thomists and the Jesuits, and even the Molinists and the Jansenists, agreed among themselves more than one thinks" (G.vi.332–33).

Again, we face the vexing questions raised at the end of §3. Leibniz's ability to locate agreement between contesting parties hinges on his claim to have established both what the truth is and that this truth is what the contesting parties had intended to convey. If this truth is the intended content of their utterances, or the content that the principle of charity obliges us to assign to them, then we may claim agreement. What remains doubtful, however, is whether we would be able to convince the disputants themselves that this is where matters stood. Thus, Leibniz's assertion of an underlying agreement rings hollow.

On the contested theological issues themselves, Leibniz aligns himself most closely with the Jesuits.³⁸ However, he is by no means an uncritical defender of their teachings. On the topic of freedom, in particular, there is

a vigorous exchange of views between the correspondents that highlights important differences between Leibniz's position and that favored by most Jesuits. For the Jesuits of the seventeenth century, Jansenism amounted to little more than Calvinism, insofar as they saw it as denying free will and its operation in the acceptance or rejection of divine grace. Among the Jesuits, the most influential author on this topic was Luis de Molina (1533–1600). For Molina, God knows who is among the elect by what he terms “middle knowledge” (*scientia media*), a knowledge of what any creature would choose under any possible circumstance. Crucially, for Molina, this knowledge is independent of God's knowledge of his own decrees, for if God knew what a creature would do on the basis of knowing what he had willed to happen, this “postvolitional” foreknowledge would negate the possibility of creaturely freedom. According to Molina's definition, an agent is free if, with all the requisites for acting posited, the agent can act or not act, or can do one thing in such a way that she can also do the contrary.³⁹ Basic to this account is the stipulation of the absence of prior causes that determine the will to one course of action rather than another. Under this condition, the will possesses a genuine freedom that can be exercised in the acceptance or rejection of grace.

In *Theodicy*, §48, Leibniz strongly objects to what he describes as the “indifference of equilibrium” presupposed by Molina's theory. Since the will's freedom is defined by the absence of any determination by prior states, he argues, Molina's account assumes for the will a “chimerical” power of determining itself (G.vi.129/Huggard 149–50). In Letter 41, after his first reading of the *Theodicy*, Des Bosses challenges this criticism, suggesting that the two positions are not as far apart as Leibniz thinks. On the account favored by the Jesuits, the object of the will is always the good as such. Thus, the will always has a reason for acting, even if that reason is not sufficient to determine the will (which it cannot be if the will chooses freely).

Surprisingly, perhaps, Leibniz resists the opportunity to reinforce his agreement with the Jesuits on this point. Implicitly invoking the principle of sufficient reason in Letter 42, he repeats his charge that “the power of determining oneself without any cause, or without any source of determination, implies a contradiction.” At the same time, he stresses that this does not entail the metaphysical necessity of the effect. Although it is metaphysically necessary that any action have a determining cause, this cause is not metaphysically necessitating. In Leibniz's preferred phrase, the determining cause “inclines without necessitating.”⁴⁰

In the *Theodicy*, Leibniz associates this mode of determination with

what he calls “moral necessity,” an expression also used by Jesuit writers.⁴¹ Des Bosses agrees that among Jesuits this is an acceptable way of characterizing God’s choice of the best: though freely made, God’s choice is morally necessary, since any other choice would be incompatible with God’s perfection. Des Bosses questions, however, whether this terminology can properly be applied in the case of human actions, especially acts of sin. If Adam’s sinning was morally necessary, Des Bosses reasons, then it is hard to avoid the conclusion that God, who has created Adam such that he is predetermined to sin, is also the author of Adam’s sin.

Leibniz appears to take Des Bosses’s concern seriously, for in Letter 42 he responds with the following concession:

I, too, would not say that there was a moral necessity to sin in Adam or in anyone else, but only this: there prevailed in him an inclination to sin, and therefore there was some predetermination, though not one that was necessitating. I acknowledge that this is a moral necessity in God of acting for the best, and in confirmed spirits of acting well. And in general I should prefer that words be so interpreted that what sounds bad does not follow. And so it is preferable never to acknowledge a moral necessity except toward the good, because we should believe that a wise person cannot do things that are evil. I do not know if I spoke differently on some other occasion; if I did, the wording was incautious and ought to be corrected, though the lapse was in the phrasing, not in the meaning.

Focusing on the second half of this passage, we might see it merely as a hasty attempt on Leibniz’s part to frame his position in a way that is unobjectionable to Des Bosses. But such a reading would lead us away from the real differences that separate the correspondents. Interestingly, Leibniz’s response does not address the charge that Adam’s predetermination to sin, which he here reaffirms, would render God the author of Adam’s sin. In the *Theodicy*, he treats this point at length, defending the view that God foresees and permits Adam’s sin, without either compromising Adam’s freedom or making God the author of Adam’s sin.⁴² Here, Leibniz takes Des Bosses’s criticism to be limited to the charge that he has improperly applied the term “moral necessity” to acts of sin, which Leibniz admits would be an error: “it is preferable never to acknowledge a moral necessity except toward the good, because we should believe that a wise person cannot do things that are evil.”

But where exactly does the error lie? Why is it wrong to attribute a moral necessity to acts of sin? Leibniz’s statement suggests two possibili-

ties: because the notion of moral necessity applies only in the case of inclinations toward the good and acts of sin are the result of inclinations toward evil; or, because moral necessity applies only in the case of the wise, who “cannot do things that are evil” but are infallibly determined to choose the good. The first of these explanations cannot be correct, for Leibniz believes that all inclinations are inclinations toward ends or objects represented as good (*sub ratione boni*). Although sinful acts are morally evil, they are elicited by inclinations that represent those acts as good. So, the error must lie in the misapplication of the notion of moral necessity to inclinations that, in principle, can fail to track the good, because they are directed toward false or merely apparent goods. These inclinations are in contrast to the inclinations of “the wise,” who never mistake an apparent good for the true good, and hence cannot do things that are evil.

In the *Theodicy*, Leibniz almost always reserves the term “moral necessity” to refer to the choices of God or the blessed, who cannot fail to do the best: “it must be admitted that God, that the wise, is led to the best by a *moral necessity*.”⁴³ In these contexts, the term connotes the incompatibility of God’s supreme perfection (or the perfection of the blessed) and the doing of evil.⁴⁴ Significantly, Leibniz does not attempt to draw a distinction between the modality that governs the determination of God’s will by the good and a putatively weaker notion of determination that is operative in the case of Adam’s inclination toward sin. As we have seen, Leibniz affirms the existence of a “prevailing” inclination to sin that determines Adam’s choice with the same certainty with which God and the blessed are determined to choose the best. Moreover, he makes it clear in the *Theodicy* that the same account of free choice should be applied in both cases: “There is always a prevailing reason that prompts the will to its choice, and for the preservation of its freedom it suffices that this reason inclines without necessitating. . . . The will is never prompted to action except by the representation of the good, which prevails over opposing representations. This is admitted even in relation to God, good angels and souls in bliss; and it is acknowledged that they are no less free because of that” (§45; G.vi.127–28/Huggard 148).

In the case of both God and created beings, the necessity that Leibniz rejects is metaphysical necessity; in both cases, he opposes this to a type of determination in which a representation of the good supplies a “prevailing reason” that prompts the will to choose. In conceding to Des Bosses that the term “moral necessity” should not be applied to Adam’s sinning, then, Leibniz can mean only that it is wrong to apply the term to Adam’s action, because Adam, in contrast to God, can do evil.

In Letter 43, however, Des Bosses points to several passages in the *Theodicy* where Leibniz seems to commit himself to the moral necessity of sinful acts. The most notable is *Theodicy*, §282, where Leibniz argues that it is essential to understand clearly the distinction “between meta-physical necessity and moral necessity”: “One can say in a certain sense that it is necessary that the blessed not sin; that demons and the damned sin; that God himself should choose the best; that man follows the course that in the end attracts him the most. But this necessity is not opposed to contingency” (G.vi.284). Here Leibniz uses “moral necessity” in a sense different from that canvassed above. Again, he defends a univocal explanation of free action in God, the blessed, “demons and the damned,” and all human beings, in whom the will is determined to choose the greatest apparent good. But he now uses “moral necessity” to characterize the mode of determination itself: it is morally necessary that *any* will choose that which is represented to it as the greatest good.⁴⁵ Des Bosses isolates this as the key point on which Leibniz’s account diverges from that of the Jesuits. According to Des Bosses, Jesuits do not deny that in determining itself the will acts for the sake of an object or end represented as good. But they do deny both that the will is constrained to choose the greatest apparent good, and that a failure to act in this way would imply a contradiction, as if the will had determined itself on the basis of no reason at all.⁴⁶

On the face of it, this might seem to indicate Des Bosses’s acceptance of the Molinist position. In Letter 43, though, Des Bosses goes on to cite with apparent sympathy the rival view of the Jesuit Gabriel Vasquez, who he says agrees with Leibniz “that the will cannot choose one thing over another unless the intellect represents it more forcefully.”⁴⁷ Although Vasquez affirms this thesis, Des Bosses believes that he can avoid the objectionable consequences of Leibniz’s doctrine of moral necessity, because Vasquez includes in his account a provision for the suspension of choice: “the will can suspend the choice of an object that is represented more forcefully, and then the intellect is determined by this very fact to consider motives that are for their part represented less forcefully. On closer consideration, it follows ultimately from this that the intellect represents contrary motives more forcefully and thus that the will can choose the opposite.”

Des Bosses presents this as a position that cannot be reconciled with Leibniz’s principles. However, in Letter 44 Leibniz accepts Vasquez’s view as consistent with his own, a claim that is supported by what he says in *Theodicy*, §311.⁴⁸ As described by Des Bosses, Vasquez’s account of the will’s suspension of choice anticipates the position defended by Locke

in the second and later editions of the *Essay concerning Human Understanding*. And it is noteworthy that in the *New Essays* as well, Leibniz embraces this doctrine as his own. If we have trained our mind in the right way, we will be able “to stop our desires and passions from taking effect, i.e., to suspend action.” Then “we can find ways of fighting against them, either by contrary desires and inclinations or by diversion, that is, by occupying ourselves with other matters. It is through these methods and stratagems that we become masters of ourselves.”⁴⁹

In Letter 45, Des Bosses expresses his satisfaction with Leibniz’s reply, yet he concedes that he still does not understand how Adam could be created with a greater inclination to good than to evil and still go on to sin. How could an Adam, who was morally upright at creation, sin at all, if we do not grant to his will the power of determining itself, as the Molinists require? Leibniz offers his final word on the topic in Letter 46. Granting that at Adam’s creation an inclination to good prevailed in him, the future inclination to sin was nonetheless predetermined in Adam: “for everything in things is in some way preestablished, and the past is pregnant with the future.” The last clause, familiar from Leibniz’s early writings, suggests that the act of sinning is an inevitable consequence of Adam’s earlier actions and inclinations, and that it follows from them by a moral necessity. The point that Leibniz continues to insist on, however, is that this predetermination does not make God the author of Adam’s sin; rather, God merely permits Adam’s sin as part of the best possible series of things. On this point, Leibniz’s position remains constant throughout his career.⁵⁰

Leibniz’s exchanges with Des Bosses on the topics of freedom and moral necessity do not culminate in a definitive statement of his position. However, like his exchanges with Arnauld on the questions of truth and contingency, they force Leibniz to be more explicit about his underlying principles and allow a fuller understanding of the tensions implicit in his position. As we shall see, Leibniz’s extensive exchanges with Des Bosses on the topics of substance and body make a similar contribution to the clarification and elaboration of his metaphysics.

6. The Metaphysics of Substance

The best-known sections of the Leibniz–Des Bosses correspondence are those devoted to the nature of substance and body. In part, these discussions grow out of the correspondents’ shared interest in explaining the Catholic dogma of transubstantiation within Leibniz’s metaphysics. It would be a mistake, however, to think that a debate about transubstantiation drives the correspondence as a whole. As we have seen, many other

philosophical topics are on the table, and even concerning substance and body the correspondents have much to say that is not directly traceable to the problem of transubstantiation. Furthermore, however important that topic may turn out to be, discussion of it must be situated within the larger context articulated by Des Bosses in his opening letter: the project of accommodating Leibniz's philosophy with the doctrines of Aristotle and the dogmas of the Catholic church. While the latter is an abiding concern for Leibniz, the former forces him to confront a significant tension within his own position. In brief, it points to the following pivotal question: Does Leibniz's metaphysics, like Aristotle's, uphold the existence of embodied, living creatures (plants, animals) as paradigmatic substances, or does it take a sharp turn toward idealism, rejecting the ultimate reality of anything except immaterial monads? The weight of this question can be felt in Leibniz's writings going back to the late 1660s.⁵¹ For a long time, it was assumed that Leibniz's "mature philosophy," dating from the mid-1680s, was the metaphysics of monads. More recently, this assumption has been challenged on a number of fronts, and hence it is necessary to adopt a more nuanced approach.

During the 1680s, the years leading up to and including the "Discourse on Metaphysics" and the correspondence with Arnauld, Leibniz's theory of substance is premised on an account of the essential properties of substance. According to Leibniz, these properties include (1) being an intrinsic unity, or *unum per se*; (2) being a principle of force or action; (3) possession of a complete concept or nature, through which a substance is individuated; and (4) universal expression or "perception."⁵² This is not an exhaustive list, but it includes the properties from which Leibniz purports to derive other essential properties of substance, such as indivisibility and identity through change.⁵³ Here we are most concerned with the first two properties, which serve as the basis for Leibniz's repudiation of Descartes's conception of matter, and of the physics and metaphysics associated with it. The thrust of Leibniz's attack is that the Cartesian conception of matter as *res extensa* fails both as an account of matter and as an account of substance. By itself, a merely extended thing lacks both a *per se* unity and an intrinsic principle of action. Hence, Descartes fails to explain the possibility of "corporeal substance," or how any material thing can be a genuine substance.

For Leibniz, this has enormous consequences, since on his view to be real at all, an entity must either be a substance or be explained in terms of the prior existence of substance. Only substance is what he calls a "being *per se*": an entity whose existence is not explained in terms of anything

else (except the productive power of God). Critically, Leibniz associates this feature of substance with its being a “true unity.” As he writes to Arnauld, “I hold this identical proposition, differentiated only by the emphasis, to be an axiom, namely, ‘that what is not truly *one* being is not truly *one being* either’” (G.ii.97/AG 86). This axiom underlies Leibniz’s claim that one substance cannot be constructed from two substances and that one substance cannot be divided into two substances. Similarly, it leads to a sharp distinction between genuine unities, on the one hand, and everything else: “phenomena, abstractions, or relations,” which owe their existence to the mind (G.ii.101/AG 89).

Applying this axiom to Descartes’s position, Leibniz argues that a merely extended thing would not be real at all, since in the division of extension we never encounter anything that is truly one; we find only parts within parts to infinity. In response to Arnauld’s suggestion that “it may be of the essence of matter to be devoid of true unity,” Leibniz counters that “it will then be of the essence of matter to be a phenomenon, lacking all reality as would a coherent dream, for phenomena themselves like the rainbow or a heap of stones would be wholly imaginary if they were not composed of entities possessing true unity” (G.ii.97/LA 122). If matter is real, it can be so only in virtue of being constituted from things that themselves are unities per se, or substances. As Leibniz presents the argument to Arnauld, “I believe that *where there are only entities through aggregation, there will not even be real entities*; for every entity through aggregation presupposes entities endowed with a true unity, because it obtains its reality from nowhere but that of its constituents, so that it will have no reality at all if each constituent entity is still an entity through aggregation; or one must yet seek another basis for its reality, which in this way, if one must constantly go on searching, can never be found” (G.ii.96/LA 120).⁵⁴

The thesis of the reciprocity of being and unity occupies a central place in the correspondence with Des Bosses, in part because Des Bosses confronts Leibniz with the principle as early as his second letter, demanding his views on certain Aristotelian theses, among them that “being and unity are convertible [*Ens et unum convertuntur*].” To appreciate the import of this principle, we must see it as connected with another of the essential properties of substance, that of having an internal principle of force sufficient for the production of all its own states. Putting these ideas together, we find Leibniz committed to the following theses:

1. *x* is a being per se, or substance, if and only if *x* is a unity per se.
2. *x* is a unity per se if and only if *x* possesses an internal principle of force;

from which follows:

3. x is a being per se, or substance, if and only if x possesses an internal principle of force.

For Leibniz, a substance's possession of a "primitive active force" explains how it is able to qualify as a true unity. A substance's primitive active force provides the basis for its persistence, or identity through change: it determines that many distinct states are states of one and the same substance. Likewise, for a corporeal substance, the primitive active force explains how a plurality of material parts is united in one substance, whose unity is identified with that of the primitive force.

Leibniz characterizes a substance's primitive active force as a "substantial form," or "entelechy." The nod to Aristotle is intentional, for, as Des Bosses observes, Leibniz aims to uphold certain basic Aristotelian principles, including the distinction between form and matter, where form is understood as an active power that brings about spontaneous changes in a substance's state, and matter, a passive power that limits or resists changes in the state of the same substance. On any rendering of Leibniz's metaphysics, substance is conceived of in terms of some analogue of form and matter, or active and passive power. The hurdle that any interpretation of his position must cross is determining in what exactly these powers consist, and whether Leibniz is committed to a univocal account of them. On this point, the evidence is indecisive. During the 1680s, Leibniz seems to accept that substance, in principle, could be either an animated body, whose active power is an appetitive principle and whose passive power is the basis of its embodiment, or a soul or soul-like entity, whose active power is an appetitive principle but whose passive power is merely a capacity for confused perception. Given this, an account of the essential properties of substance does not settle the question of the extension of the term "substance." It does not tell us whether the class of substances consists exclusively of animated bodies, or corporeal substances; exclusively of souls, or soul-like substances; or of both corporeal substances and soul-like substances.

Trying to pin down Leibniz's answer to this question is exceedingly difficult. Robert Sleight has concluded that different positions are emphasized in the draft and final versions of the "Discourse on Metaphysics," and that in the Arnauld correspondence, Leibniz aimed to defend the corporeal substance theory as a viable position, even if he "did not intend to commit himself to [it]."⁵⁵ During this period, moreover, there is evidence of an important ambiguity in Leibniz's conception of corporeal substance that has ramifications for his position in the Des Bosses correspondence.

In a text from the early part of the period, “De mundo praesenti,” Leibniz identifies the matter of a corporeal substance with what he elsewhere calls “primary matter,” a passive power that has no existence apart from the form or active power with which it constitutes a complete substance:

Corporeal substances have parts and species. The parts are matter and form. Matter is a principle of passion, or primitive force of resisting, which is commonly called bulk or antitypy, from which flows the impenetrability of body. *Substantial form* is a principle of action, or primitive force of acting. But in every substantial form there is a kind of cognition, that is, an expression or representation of external things in a certain individual thing, according to which the body is an *unum per se*, namely, in the substantial form itself. This representation is conjoined with a reaction, i.e., endeavor or appetite, according to this cognition of its acting. This substantial form is necessarily found in every corporeal substance that is an *unum per se*. So if beasts are not mere machines, it is necessary for them to have substantial forms, and these are called *souls*. (A VI.iv: 1507–08/LOC 285–87)

According to the account presented here, which we will call the Unity View, neither the form nor the matter of a corporeal substance is an independently existing entity. Both exist only as united in an animated body, which is an *unum per se*.⁵⁶

This account can be contrasted with another description of the components of a corporeal substance that appears in a marginal comment to Leibniz’s letter to Arnauld of 9 October 1687:

But if one takes as matter of corporeal substance not the mass without forms but a secondary matter, which is the multitude of substances whose mass is that of the whole body, it may be said that these substances are parts of this matter, just as those that enter into our body form part of it, for as our body is the matter, and the soul is the form of our substance, it is the same with other corporeal substances. And I find no more problem there than in the case of a human being, where we agree on all that. The problems that are raised on these topics originate *inter alia* from the absence usually of a distinct enough concept of the whole and the part, which basically is nothing other than an immediate requisite of the whole, and in a way homogeneous. Thus parts can constitute a whole, whether it has a genuine unity or not. It is true that the whole which has a genuine unity can remain strictly the same individual, although it loses or gains parts, as we experience in ourselves; thus the parts are only immediate requisites *pro tem*-

pore. But if one were to understand by the term “matter” something that is always essential to the same substance, one might in the sense of certain Scholastics understand thereby the primitive passive power of a substance, and in this sense matter would not be extended or divisible, although it would be the principle of divisibility or of that which amounts to it in the substance. But I do not wish to argue over the use of terms. (G.ii.119–20)⁵⁷

The most striking difference between this passage and the previous one is that Leibniz here identifies the matter of a corporeal substance not with primary matter, or primitive passive power, but with secondary matter [*une matière seconde*], which itself is an aggregate of smaller corporeal substances. To distinguish this account of corporeal substance from the previous one, we will call it the Composite View, since it conceives of corporeal substance as composed of a substantial form and a multitude of other substances, which exist independently of the substance whose body they constitute. That we have before us two distinct conceptions of corporeal substance is reinforced by the second half of the passage, in which Leibniz notes that in another sense the matter of a corporeal substance could be identified with its primitive passive power. As he presents it, one of the distinguishing features of the Composite View is that, while secondary matter is unified in a corporeal substance, no part of that matter is essential to the substance. The parts of a composite corporeal substance are immediate requisites only *pro tempore*: they come and go, while the substance itself endures. By contrast, Leibniz claims that the primary matter of a corporeal substance is essential to it.

Leibniz raises this distinction only to set it aside with the comment that he does not wish to argue over the use of terms. More is at stake, though, than merely a verbal point. It is a verbal point that the term “matter” has more than one sense; but those senses also support different accounts of the structure of corporeal substance. On the Unity View, a corporeal substance is an ontological primitive: its form and matter have no existence independent of the existence of the corporeal substance. On the Composite View, a corporeal substance’s matter is identified with an infinity of independently existing substances, and it falls to the substantial form to supply a unity to this ever-changing mass, such that it constitutes the body of one substance. In Leibniz’s mind, these two accounts of corporeal substance may not be genuine rivals. The two views do not directly contradict each other. If one assumes that any corporeal substance has both primary and secondary matter, then its nature may be explained either according to the Unity View, taking into account its primary matter, or according to the

Composite View, taking into account its secondary matter. Both views, however, face formidable challenges. With respect to the Composite View, an obvious question is how a substantial form can confer a *per se* unity on the constantly changing collection of substances that make up the mass of its body. With respect to the Unity View, we face the question of how stable the position is in Leibniz's thought. From the 1680s onward, Leibniz shows signs of being attracted to an idealistic conception of primary matter that renders it a principle of passivity or resistance in a soul or soul-like substance. From this perspective, the theory of monads is the natural successor of the Unity View. But with that theory introduced, we encounter a new and deeper problem of how to reconcile it with the Composite View.

These issues remain central in Leibniz's exchange with Des Bosses. As we will see, there is reason to question whether Leibniz arrives at a final resolution of them. The open-ended nature of his speculations about corporeal substance is evident in his correspondence with Arnauld, and things do not change significantly as his career progresses.⁵⁸

This way of thinking about the development of Leibniz's philosophy is supported by two related methodological points. First, in reconstructing his position, we should reject the image of a philosophical theory as an atemporal, deductive system of propositions. Leibniz's philosophy, instead, should be seen as having the structure of a web of belief: there are foundational principles that he would not have thought of relinquishing; there are other, secondary propositions that follow in a fairly direct way from those principles; and there are more tentative claims which are loosely tied to core propositions but which could conceivably be abandoned depending upon how the theory develops. The evolution of Leibniz's theory is driven by its ability to resolve outstanding philosophical problems, meeting in this way the often competing demands of experience, physical theorizing, and theological orthodoxy—to mention only three factors.

Propositions asserting the existence or nonexistence or reducibility of corporeal substance, we suggest, are located toward the periphery of Leibniz's theory. They are theses that to some extent are up for grabs, depending upon the answers that are given to other questions. On the face of it, this may seem at odds with the central role given by Leibniz to the notion of substance. However, as already suggested, Leibniz's certainty concerning the nature of substance is largely limited to the intension of the term "substance" as opposed to its extension. That is, Leibniz has deep convictions about the essential properties of substance, but he is less certain

about the class of things that instantiate those properties. In particular, for much of his career Leibniz lacks any decisive argument for the conclusion that the class of substances either does or does not include corporeal substances.

With this background in place, we are ready to turn to the discussions that precipitate Leibniz's examination of corporeal substance in the Des Bosses correspondence.

7. The Union of Soul and Body

According to Leibniz's hypothesis of the preestablished harmony of soul and body, God created the soul and body of any individual such that each acts according to its own laws while agreeing perfectly with the actions of the other. Leibniz argues that this preestablished harmony provides the best explanation of both the apparent interaction of soul and body and their union.

Although the hypothesis of preestablished harmony is most famously developed in the 1695 "New System," its predecessor—the "hypothesis of concomitance"—was presented to Arnauld and criticized by him. Leibniz had argued in the "Discourse on Metaphysics" and in earlier letters to Arnauld that while each substance expresses the entire universe from its own point of view, it expresses its own body most clearly. Arnauld challenged this notion of expression, asking how it could be that the soul expresses the motions of the lymph vessels more clearly than the motions of the moons of Saturn. To this Leibniz responded that the soul expresses the body more clearly than the rest of the world because it expresses the world *through* its expression of its body (G.ii.90/LA 113).

In the Arnauld correspondence, Leibniz links the soul's expression of the body to its role as the body's substantial form: "The soul . . . is the form of the body, because it [*parcequ'elle*] expresses the phenomena of all other bodies in accordance with the relationship to its own" (G.ii.58/LA 65–66). Reading this in conjunction with the Composite View, we might infer that a soul and its body are one in substance, that is, a corporeal substance, simply in virtue of the relation of expression that holds between them. A similar conclusion can be drawn from what Leibniz says about the union of soul and body. In the "Discourse," the correspondence with Arnauld, and the "New System," he consistently argues that the hypothesis of preestablished harmony explains the union of soul and body, by which he appears to mean that it explains how the soul and the body together form one entity.⁵⁹

This aspect of Leibniz's position received its most stinging critique

from the French Jesuit René-Joseph de Tournemine in articles published in the *Mémoires de Trévoux* in May and June of 1703. Tournemine took Leibniz to task for the weak notion of unity provided by preestablished harmony. According to Tournemine, harmony cannot be said to guarantee the union of soul and body, but rather constitutes a mere relation between the two. Addressing Leibniz's famous metaphor of two synchronized clocks, Tournemine writes: "After all, *correspondence, harmony*, are neither *union* nor essential connection [*liaison*]. Whatever resemblance one supposes between two clocks, even if the accuracy of their relations [*rapports*] were perfect, one could never say that these clocks were united because the movements of the one correspond to those of the other with a complete symmetry."⁶⁰

What is required, Tournemine claims, is not merely a moral or ideal union of two substances but a "real union" of soul and body, a union that is not "exterior but intimate: a union of possession and proprietorship."⁶¹ Such a real union would show how no other soul but one's own could animate one's body and how no other body but one's own could be animated by one's soul. It would explain how, even if all the substances in the world should stand in reciprocity (or harmony) with each other, the relation between soul and body in an individual is unique.

Although Leibniz's response was not published in the *Mémoires* until 1708, we know that he had turned his attention to Tournemine's criticism by early 1706, for he refers to it in his final letter to Burcher de Volder (19 January 1706) and in his first two letters to Des Bosses (2 February and 14 February 1706). In his letter to De Volder, Leibniz seems to dismiss Tournemine's criticism as the demand for a kind of union that is unintelligible in itself and unsupported by reason:

In the schools they commonly look for things that are not so much ultramundane as utopian. Recently the clever French Jesuit Tournemine supplied me with an elegant example of this. When he had praised somewhat my preestablished harmony, which seemed to explain the agreement that we perceive between the soul and the body, he said that he still desired one thing, namely, the reason for the *union*, which certainly differs from the agreement. I answered that whatever [*nescio quam*] that metaphysical union is that the schools add over and above agreement, it is not a phenomenon, and we do not have any notion of it or acquaintance with it. Thus I could not have intended to explain it. (G.ii.281/AG 184)⁶²

On the basis of these comments alone, we would have to conclude that Leibniz had little sympathy for a "metaphysical union" of soul and body.

His reasons for rejecting it are those of a sober-minded philosopher: we lack any distinct conception of such a union, and the phenomena can be adequately accounted for by the hypothesis of preestablished harmony alone; the postulation of a further, metaphysical union is explanatorily idle.

Leibniz's published reply to Tournemine makes a number of the same points; however, in place of the skepticism that characterizes his remarks to De Volder we find a more concessive tone:

I must admit that it would have been very wrong of me to object to the Cartesians that the agreement God immediately maintains, between soul and body, according to them, does not bring about a true [*véritable*] union, since, to be sure, my preestablished harmony would do no better than it does. My intent was to explain naturally what they explain by perpetual miracles, and I tried to account only for the phenomena, that is, for the relation that is perceived between soul and body. But since the metaphysical union one adds is not a phenomenon, and since no one has ever given an intelligible notion of it, I did not take it upon myself to seek a reason for it. However, I do not deny that there is something having this nature. (G.vi.595/AG 196–97)

Again, Leibniz claims that the metaphysical union of soul and body is not among the phenomena, that no one has succeeded in conveying an intelligible notion of it, and that, consequently, he has not sought to explain it. In his letter to De Volder this set of assertions is accompanied by what looks like a rejection of a metaphysical union. In his reply to Tournemine, Leibniz takes the opposite tack. Although a metaphysical union goes beyond the phenomena, he does not for that reason deny that there is such a union between soul and body by virtue of which they constitute one thing. He cautions only that our knowledge of this union is confused and that we can grasp it only by analogy.⁶³

The exchange between Tournemine and Leibniz occupies a special place in Leibniz's correspondence with Des Bosses. With his first letter, Leibniz forwarded to Des Bosses the draft of his reply to Tournemine, which he had already sent to France. Des Bosses replied in Letter 3 by pressing Leibniz on the issue of soul-body union, using Tournemine's critique as a starting point. According to Des Bosses, the union of soul and body "cannot consist in a relational mode; for relations, like other accidents, presuppose an already constituted substance." He continues: "And it is for this reason that Aristotle denies that the parts of a substance are related, either to the whole or to each other, prior to the work of the mind. Indeed, since a relation is some order of one thing to another, how can there

be a real order when strictly speaking the thing is one? It should not be concluded, therefore, that there is a real relation between the soul and the body, but that there is only a relation in a manner of speaking, as they say, which arises in the first place through a mental abstraction of the body and the soul from each other.”

Identifying his position with that of Aristotle and Aquinas, Des Bosses argues that it is a mistake to think of corporeal substance as resulting from a “real relation” between an independently existing soul and body. Instead, priority must be given to the “absolute existence” of the “whole concrete substance,” from which soul and body, or form and matter, are abstractions.

Des Bosses himself, then, defends a position not dissimilar to the Unity View. Replying in Letter 4, Leibniz appears to affirm this conception of corporeal substance: “In general, the soul is an entelechy or primitive active power in a corporeal substance, through which the matter or primitive passive power of the same substance is completed; and by means of the modification of these primitive powers, actions and passions are produced in the corporeal substance itself.” In a passage deleted from the draft of the letter, Leibniz is even more explicit, asserting of soul and matter that “each is as incomplete as the other.” Beyond this, however, he has little to add. In another passage deleted from the draft of Letter 4, he allows that “it is difficult to explain in a sufficiently distinct way, such that no obscurity remains,” how the modification of primitive active and passive power produces actions and passions in the corporeal substance. And later in the draft he deletes the following text, for which there is no corresponding passage in the sent version of the letter: “Those things you add about a union inferred from the existence of a composite perhaps belong to a deeper inquiry, for it will be one which will state that union is of the essence of a composite. But perhaps it is not necessary now to plunge into these thornier matters.”

The last passage hints at the complexity of Leibniz’s view of corporeal substance and helps to explain why he initially seems reluctant to enter into a detailed discussion of soul-body union. To all appearances, he is of a divided mind on the topic. On the one hand, he assents to the Aristotelian position that Des Bosses defends, according to which corporeal substance is constituted from primitive active and passive powers, neither of which exists independently of the other. On the other hand, he himself frames the issue as involving the union of a composite, by which he presumably means a substance made up of prior, component substances—an assumption that Des Bosses rejects. Leibniz’s published reply to Tournemine does

not settle where he comes down on this question. Referring to that text in Letter 20, Leibniz reiterates to Des Bosses that he does not deny “the metaphysical union of a complete substance [*suppositum*].”⁶⁴ By this he means a conception of the unity of the human being according to which soul and body are truly one. However, this statement does not tell us whether he conceives of this unity as a “concrete substance” that is prior in existence to both the soul and the body, or as a unity superadded to the soul and the body taken as independently existing entities. In other words, on the assumption that Leibniz upholds the existence of corporeal substance as an *unum per se*, it is unclear whether he conceives of it according to the Unity View or the Composite View.

On either reading, Leibniz does not conceive of the union of soul and body in the way a Cartesian would, as the union of two distinct substances. On the Composite View, the soul qualifies as a substance in its own right (if only an “incomplete” substance), but the body does not; it is merely an aggregate. Seen from the perspective of Leibniz’s reply to Tournemine, then, the Composite View presupposes a metaphysical union of the soul taken as substantial form and a mass of lesser corporeal substances that make up the (secondary) matter of its body. Such a reading is not without textual support.⁶⁵ The correspondence with Des Bosses, however, gives us reason to doubt whether the Composite View, so framed, is Leibniz’s considered understanding of corporeal substance. By the beginning of the exchange, Leibniz has come to accept that the only ultimately real things, in terms of which the existence of everything else is to be explained, are unextended, soul-like monads. This development in his philosophy, in turn, forces a reformulation of the problem of corporeal substance. Now attention is focused on the question of how, beginning from a basic ontology of monads, corporeal substances can arise. As we will see, in his letters to Des Bosses, Leibniz experiments with versions of both the Unity View and the Composite View. An implicit premise of both accounts, however, is that monads alone cannot explain the existence of corporeal substance.

8. Composition and the Unity of Corporeal Substance

Many of the most explicit statements of Leibniz’s theory of monads appear in the major correspondence that ends just as the Des Bosses correspondence is about to begin. In his final letter to De Volder, dated 19 January 1706, Leibniz offers the following summary of his ontology: “there can be nothing real in nature but simple substances and the aggregates that result from them. Moreover, we have acknowledged nothing but percep-

tions or their grounds in these simple substances. Anyone who assumes more things must have marks by which they are proved and revealed" (G.ii.282/AG 185*).⁶⁶ A year and a half earlier, Leibniz had described his position to De Volder in very similar terms: "considering the matter carefully, we must say that there is nothing in things but simple substances, and in them, perception and appetite. Moreover, matter and motion are not substances or things as much as they are the phenomena of perceivers, the reality of which is situated in the harmony of the perceivers with themselves (at different times) and with other perceivers" (G.ii.270/AG 181).⁶⁷

Call the thesis that the only ultimately real things are soul-like, simple substances the thesis of Monadism. In his letters to De Volder, Leibniz clearly commits himself to Monadism. This commitment does not mean that he believes that nothing exists besides monads. At the very least, he also upholds the existence of aggregates that "result" from monads. Monadism, however, entails that soul-like, simple substances alone have an absolute or *per se* existence, from which it follows that, if other things do exist, their existence must be explained in terms of the prior existence of monads.

Leibniz makes a variety of claims to De Volder about the relation of monads to matter. Some of these describe a reduction of matter and its properties to monads and their properties. Others concern the relation that any monad must have to some particular matter. Here Leibniz asserts, first, that it is essential to the nature of any created monad that it involves primary matter, or primitive passive power: "What I take to be the indivisible or complete monad is the substance endowed with primitive power, active and passive, like the 'I' or something similar" (G.ii.251/AG 176). In addition, he maintains that any monad is associated with some organic body: "even if monads are not extended, they nonetheless have a certain kind of situation in extension . . . through the machine over which they preside. I do not think that there exist any finite substances that are separated from every body and, therefore, lack situation or order in relation to the other coexisting things in the universe" (G.ii.253/AG 178*). To Monadism, then, we must add the thesis of Monadic Embodiment: no created monad is ever without an organic body to which it stands as a form or "primitive entelechy" (G.ii.250/AG 175–76).

Finally, in texts from this period, Leibniz defends a reductive analysis of the matter constitutive of a monad's body. Replying to De Volder in another letter, he writes: "I don't really eliminate body, but reduce it to what it is. For I show that corporeal mass, which is thought to have something

over and above simple substances, is not a substance, but a phenomenon resulting from simple substances, which alone have unity and absolute reality" (G.ii.275/AG 181). The details of this analysis are controversial.⁶⁸ The crucial point, however, is that along with Monadic Embodiment, Leibniz advances a claim about the reduction of bodily mass to monads. Call this the Reduction thesis. Together, Monadic Embodiment and Reduction entail that any created monad has a body and that this body is, in the final analysis, a complex organization of other monads. As Leibniz presents the view in "Principles of Nature and Grace," §3: "each distinct simple substance or monad, which makes up the center of a composite substance (an animal, for example) and is the principle of its unity, is surrounded by a *mass* composed of an infinity of other monads, which constitute the *body belonging to* this central monad, through whose affections the monad represents the things outside it, similarly to the way a center does" (G.vi.598–99/AG 207*).

Let us assume, then, that Leibniz holds that no created monad ever exists without an organic body. Does it follow from this that the monad and its body together form a corporeal substance that possesses the essential property of being an *unum per se*? In the preceding passage from the "Principles of Nature and Grace," Leibniz certainly suggests as much. Indeed, he gives us to understand that the proper account of corporeal substance is a version of the Composite View, modified to reflect the Reduction thesis. Since on this version of the Composite View the substances that constitute the mass (or secondary matter) of the body of a corporeal substance are ultimately other monads, we may distinguish it as the M-Composite View.

"Principles of Nature and Grace," §3, offers evidence of Leibniz's support for the M-Composite View. It is widely agreed, though, that the "Principles" is a popular presentation of Leibniz's philosophy, composed for his Austrian patron Prince Eugene. So, we need not take it as the final word on his metaphysics. A more authoritative source for this interpretation is the five-part ontological scheme that Leibniz sketches for De Volder in his letter of 20 June 1703:

I distinguish: (1) the primitive entelechy or soul; (2) matter, namely, primary matter or primitive passive power; (3) the monad completed by these two things; (4) the mass or secondary matter, or the organic machine for which innumerable subordinate monads come together; and (5) the animal, or corporeal substance, which the monad dominating in the machine makes one. (G.ii.252/AG 177*)

This passage has received much commentary, and most authors take it as a straightforward affirmation of the M-Composite View. The passage, however, is fraught with complexity. Read in the context of the letter as a whole, and in the larger context of the entire correspondence, it more clearly points to Leibniz's uncertainty concerning how exactly to explain the existence of corporeal substance within the theory of monads.

The passage bears at least two distinct readings. First, there is the M-Composite View, according to which the monad "dominating in the machine" unites the "innumerable subordinate monads" of its body in a corporeal substance. While this may be a natural way to read Leibniz, it is by no means demanded by his words. Note, first, that (5) does not explicitly state that the dominant monad makes the monads of its bodily mass, or secondary matter, one; it claims only that the "monad dominating in the machine" makes "the animal, or corporeal substance," one.⁶⁹ Perhaps the former is what Leibniz means. Nevertheless, this reading faces two formidable challenges—one textual, one philosophical. The textual problem is Leibniz's suggestion, in the very next paragraph, that only monads possess the essential property of being an *unum per se*: "since only simple things are true things, the rest are only beings by aggregation; to that extent they are phenomena and, as Democritus put it, exist by convention and not by nature" (G.ii.252/AG 177*). On no coherent reading of Leibniz's metaphysics can something that possesses a per se unity be confused with something that is merely a being by aggregation. Consequently, if only monads are true substances, then a composite consisting of a dominant monad and a mass of subordinate monads cannot be a substance.⁷⁰

Supporting this conclusion is the philosophical point that the theory of monads itself lacks the resources to explain how a dominant monad could confer a per se unity on the mass of monads that make up its body. Leibniz explicitly tells De Volder in the same letter: "Properly and rigorously speaking, perhaps one will not say that the primitive entelechy impels the mass of its body, but only that it is joined with a primitive passive power which it completes, or with which it constitutes a monad; however, it cannot influence other entelechies and substances, even those existing in the same mass" (G.ii.250/AG 175–76*). The relations among monads are limited to relations of correspondence among their perceptions and appetitions. And as Leibniz is forced to concede to Tournemine, such relations do not support the assertion of a per se unity.

Despite these objections, in the De Volder correspondence Leibniz may lean toward the M-Composite View as his account of corporeal substance. Nevertheless, it is important to be aware of the problems this creates for

his philosophy. Furthermore, it is important to see that the five-part ontological scheme does not preclude other interpretations. One such alternative is the position Robert Adams has labeled the “Qualified Monad Conception.”⁷¹ According to this account, when Leibniz uses the term “corporeal substance,” he is not referring to a separate class of substances over and above monads. Rather, he is referring to monads themselves under a different description. To speak of a corporeal substance is to speak of a monad insofar as it has an organic body, and this is consistent with the claim that the monad and its body together form only a being by aggregation. The Qualified Monad Conception is also consistent with the final item distinguished in Leibniz’s scheme: “(5) the animal, or corporeal substance, which the monad dominating in the machine makes one.” If the corporeal substance is just the monad under a different description, then obviously the monad makes that substance one, namely, itself.⁷²

The Qualified Monad Conception, however, cannot be reconciled with everything Leibniz says about corporeal substance in the post-1700 period. In an expansive account of his views recorded in a 1711 letter to Friedrich Bierling, he states succinctly: “I call a *corporeal substance* that which consists in a simple substance or monad (that is, a soul or soul-analogue) and a united organic body” (G.vii.501). Here he makes it clear that a corporeal substance is to be identified with the composite formed from a monad and an organic body—a position inconsistent with the Qualified Monad Conception. Yet is this a position that Leibniz can consistently uphold, given the objections already noted to the M-Composite View? Perhaps, but only if he is willing to weaken the conditions he imposes on the existence of a substance. The crux of the position would have to be that while the composite of a soul and the subordinated monads of its body, strictly speaking, does not qualify as a true unity, or *unum per se*, there is nonetheless a close enough relation among these monads to warrant describing them collectively as a “corporeal substance,” as opposed to a mere aggregate. In virtue of the relation of mutual expression between the soul and its body, Leibniz tells De Volder, “both the soul and the machine it animates, as well as the animal itself, are as indestructible as the universe itself” (G.ii.251/AG 176). The suggestion, then, is that the relationship between the soul and the monads of its body is sufficiently robust to support the endurance of their composite. And to the extent that we can speak of the same thing’s existing at different times with different properties, we are entitled to think of the composite of soul-plus-organic body as a substance in its own right, albeit one that lacks the essential property of *per se* unity.

That this is Leibniz's position in the De Volder correspondence is supported by the text immediately preceding his five-part ontological scheme:

If you take a mass to be an aggregate containing many substances, you can nonetheless conceive of one substance that is preeminent in it, if in fact the mass constitutes an organic body animated by its primary entelechy.⁷³ For the rest, in the monad, or complete simple substance, I do not unite anything with the entelechy except a primitive passive force, which is related to the whole mass of the organic body. Certainly, the remaining subordinate monads situated in the organs do not make up a part of [the organic body], though they are immediately required for it, and they come together with the primary monad for the organic corporeal substance, or animal or plant. (G.ii.252/AG 177*)

In the first sentence of this passage, Leibniz implicitly concedes that what he will call a "corporeal substance" is, strictly speaking, an aggregate in which one substance, the soul, is "preeminent." The monads subordinated to the soul are not essential parts of its organic body but are "immediately required" for it. Any of them can be lost and replaced by other monads, and still the corporeal substance, or animal, can endure. Its unity and identity depend solely on the dominant monad, whose primitive passive power or primary matter, Leibniz says obscurely, is "related to the whole mass of the organic body."

Such an account offers the means of reconciling Monadism with Monadic Embodiment and the M-Composite View. However, the costs of doing so are high. The view leaves Leibniz committed to *prima facie* inconsistent claims. On the one hand, he affirms the existence of embodied living things as substances in their own right over and above monads. On the other hand, he maintains that reality is limited to simple substances and the aggregates resulting from them, the latter of which he describes as "phenomena" that "exist by convention and not by nature" (G.ii.252/AG 177). To overcome the appearance of inconsistency, Leibniz must hold that when he speaks of "corporeal substance" he is not using the term "substance" in its strict sense, but rather in an extended sense that abandons the assumption that *per se* unity is an essential property of substance.

While the De Volder correspondence offers evidence that Leibniz may have been willing to make this concession at least temporarily, the Des Bosses correspondence strongly suggests that he regarded these costs as too high simply to settle for the M-Composite View. The clearest indica-

tion of Leibniz's doubts on this question circa 1706 appears in a striking passage deleted from the draft of his second letter to Des Bosses (Letter 4). In this letter, we will recall, he responds to Des Bosses's query concerning the reciprocity of being and unity. He begins by denying that there is a substantial unity in the water contained in an urn or in a school of fish swimming in the water. Next, he offers an example of something that does possess the requisite unity: "the soul is an entelechy or primitive active power completing matter, taken as a passive power. In this sense, each is as incomplete as the other." He then continues:

The union I find some difficulty explaining is that which joins the different simple substances or monads existing in our body with us, such that it makes one thing from them; nor is it sufficiently clear how, in addition to the existence of individual monads, there may arise a new existing thing, unless they are joined by the bond of a continuous [thing] that the phenomena display to us.

Although this passage does not appear in the version of the letter sent to Des Bosses, it testifies to Leibniz's skepticism concerning the M-Composite View as a satisfactory explanation of corporeal substance. If there are to be corporeal substances, something must be added in addition to the harmonized perceptions of monads. Leibniz characterizes this something extra as a "union" by which the subordinate monads of the body are joined with the soul such that "it makes one thing from them." The way he frames the problem is reminiscent of his response to Tournemine. There he conceded that he did not deny the "metaphysical union," by which a human being is made a true unity. The force of this response, however, is tempered by the fact that it is in tension with statements he makes elsewhere (for example, to De Volder), and that it comes in a context in which his basic metaphysical commitments are not on the table. In the passage deleted from Letter 4, those commitments are in view. What is significant is that in attempting to make sense of the union of a soul and the subordinated monads of its body, Leibniz finds it necessary to appeal to a further "bond" (*vinculum*), by which a "new existing thing" can arise from a plurality of preexisting monads. This bond is a precursor of the "substantial bond" that will be invoked later during the correspondents' discussion of transubstantiation. We turn to that topic in the next section; for now it is enough to note that the hypothesis of a bond of monads first appears in Leibniz's private writings as a spontaneous attempt to account for the unity of a corporeal substance.

By the beginning of the Des Bosses correspondence, then, Leibniz's

conception of corporeal substance has evolved to include three elements: (1) a soul or dominant monad; (2) the subordinate monads that constitute the mass of its organic body; and (3) a bond by which these monads are united in one substance. To this point, nothing has been said to indicate whether Leibniz affirms the existence of (3) or not. On the basis of the passage deleted from Letter 4, we can surmise only that *if* he upholds the reality of corporeal substance, he does so on the basis of a claim for the existence of (3).

The opening letters of the Des Bosses correspondence raise a further issue that complicates the resolution of this question. We have seen that a central tenet of the theory of monads is that no monad ever exists entirely separated from an organic body. In response to Des Bosses's queries, Leibniz defends Monadic Embodiment as a thesis that holds even in the case of angels: although angelic intelligences can transform their bodies in ways that other created spirits cannot, they can act on bodies only through the agency of a body to which they are united as an entelechy (Letter 14). At the same time, Leibniz denies in Letter 16 (as he does in the De Volder correspondence) that any of the monads constitutive of a soul's body are "perpetually attached" to it. None of these monads is an essential part of the soul's organic body, or of the composite that is the soul-plus-organic body. In Leibniz's terminology, the substances constitutive of a soul's body are "immediate requisites *pro tempore*": their existence is presupposed by the existence of the soul only "for a time."⁷⁴

In what sense though does the existence of one substance, the soul, presuppose the existence of other substances, those constitutive of the secondary matter of its body? As Leibniz tells Des Bosses in Letter 16, it is metaphysically necessary that any created substance be endowed with primary matter, or primitive passive power. Even God cannot deprive a monad of primary matter, "for in that way he would produce pure act such as he himself alone is." The same does not hold, however, for secondary matter. Although it is "natural" for any created monad to be united with an organic body, it is not metaphysically necessary. Through his absolute power, God could deprive a monad of its secondary matter, choosing to "fulfill the function [*munus*] of matter through a miracle." Leibniz does not say how this might occur, but presumably he is thinking of a scenario in which a soul or spirit could be conceived of as acting on bodies without acting *through* a body of its own. That is, God could create a world in which changes occur in external bodies in a way that is correlated with the desires and volitions of created spirits, and yet there would be no explanation of how those desires and volitions were effective in bringing about the

changes in question, for the former would have no natural connection with the movements of a body.⁷⁵

Such a world, Leibniz implies, is metaphysically possible, but it is not a world that God would choose to create. A world in which souls or spirits were understood to act on external bodies without acting through bodies of their own would be a world of perpetual miracles, and “those things that can occur only through a miracle are not as a rule necessary for the perfection of the universe.” Since God’s wisdom makes the creation of the world of greatest perfection a moral necessity, a world in which monads lacked bodies would not be created. Still, if it is even a possible world, Monadic Embodiment is a contingent truth. It characterizes the dependency relations among monads in the best of all possible worlds, but it would not hold in worlds in which “God fulfills the function of matter through a miracle.” The salient difference between such worlds and the actual world is that in the actual world there exist the monads that are “immediately required” by any soul or dominant monad. These are the monads that constitute (for a time) the mass, or secondary matter, of a soul’s body, and hence provide a ground in reality for its representation of itself as acting on (or being acted on by) other bodies via a body of its own.⁷⁶

Everything Leibniz writes to Des Bosses supports the conclusion that these assertions about the embodiment of monads are logically independent of the question of the union that “joins the different simple substances or monads existing in our body with us.” Leibniz believes that it is contingently true that no monad ever exists without an organic body, and yet, as we shall see, he argues to Des Bosses that it may well be false that there exist corporeal substances in the strict sense. Properly understood, then, the embodiment of monads does not entail the reality of corporeal substance. Even more suprisingly, on the rival view Leibniz sketches for Des Bosses, the reality of corporeal substance is consistent with the denial of Monadic Embodiment. That is, there could be corporeal substances even if it failed to be the case that every soul or dominant monad is associated with an organic body consisting of the monads immediately required by it. To see how this could be so, and the consequences it has for Leibniz’s conception of corporeal substance, we must turn to the arguments surrounding the *vinculum substantiale*—an idea that first enters the correspondence by the curious route of a debate over transubstantiation.

9. The Problem of Transubstantiation

Leibniz’s discussion with Des Bosses of the Catholic dogma of transubstantiation, and his introduction of the hypothesis of the *vinculum sub-*

stantiale as an explanation of it, is the most famous part of their exchange. Unfortunately, it has also given rise to a distorted view of the correspondence as a whole and of Leibniz's sincerity as a philosopher. Baldly, the charge leveled against Leibniz has been this. Leibniz introduces the *vinculum substantiale* as an ad hoc device, whose sole purpose is to account for the possibility of transubstantiation. Yet, as a Lutheran, Leibniz himself does not believe in transubstantiation. Hence, as Bertrand Russell notoriously complained, the *vinculum* is "rather the concession of a diplomatist than the creed of a philosopher."⁷⁷ The idea of a "substantial bond" does not follow logically from the theory of monads. And if Leibniz introduces it merely in order to satisfy the Jesuit Des Bosses, then he displays a lack of sincerity: he gives the appearance of defending a metaphysical doctrine that he does not, and could not, uphold.

We have already considered at some length the difficulties surrounding Leibniz's efforts to find common ground among disparate philosophical and theological positions, and especially his endeavors to accommodate his views to mainstream opinion within the Catholic church. It is worth repeating that Des Bosses himself presented Leibniz with the plan for reconciling his metaphysics with the philosophy of Aristotle and Catholic theology. So, it is fair to say that the correspondents shared this goal, and understood it as a goal that could reasonably be pursued. While the charge of insincerity may have some bite in other contexts, in the case of the *vinculum* it is groundless. Leibniz goes out of his way to emphasize to Des Bosses that he does not—and need not as a Lutheran—acknowledge the truth of transubstantiation. The salient question is always: Can a Catholic who affirms the miracle of transubstantiation do so while accepting Leibniz's theory of monads? That is what Des Bosses seeks to do, and that is what Leibniz tries to help him do, ultimately through the introduction of the hypothesis of the *vinculum*. On these grounds alone, Leibniz cannot be judged to commit himself to the existence of the *vinculum*. At most he offers Catholics like Des Bosses an extension of the theory of monads that can accommodate a central dogma of their faith.⁷⁸

We have seen, however, that the idea of a *vinculum* also attracts Leibniz's attention for reasons independent of the debate over transubstantiation. The *vinculum* first appears in his writings as an attempt to provide a satisfactory explanation of corporeal substance within the theory of monads. The issue of corporeal substance has theological ramifications, especially in connection with the doctrine that a human being, body and soul, is a substantial unity. But the philosophical interest of the issue is not limited to this. Leibniz's efforts to pursue a broadly Aristotelian program

of metaphysics and natural philosophy must confront the question of what account he can give of paradigmatic Aristotelian substances: self-moving bodies, such as those of plants and animals. As we have observed, even after he formulates his theory of monads, Leibniz remains preoccupied with explaining how these basic entities might be combined to form corporeal substances.

In Leibniz's theorizing about the *vinculum*, then, we should expect to find traces of two distinct types of concern. On the one hand, he propounds the hypothesis to Des Bosses as part of an explanation of transubstantiation. On the other hand, he also is interested in the *vinculum* on independent philosophical grounds, since, in his view, it is the basis of the only coherent explanation of corporeal substance within the theory of monads. In the next section we will attempt to disentangle these two separate lines of argument as they develop in the correspondence.

The simplistic view that the correspondence revolves around the issue of transubstantiation cannot be sustained, for it is not until Letter 30—after three and a half years of correspondence—that Des Bosses even asks Leibniz about his account of the real presence of Christ in the eucharist. In the *Theodicy*, whose page proofs Des Bosses read soon thereafter, Leibniz suggests that the doctrine of real presence could be understood on analogy with the immediate operation of remote bodies on each other, as put forward in Newton's theory of gravitation.⁷⁹ But Des Bosses wished to know more of Leibniz's view; in particular, he wished to know whether Leibniz could accommodate the Catholic church's interpretation of the doctrine of real presence.

Explaining the real presence of Christ in the eucharist is a difficult task for any metaphysics. According to the Church, and hence in the system that Des Bosses endorsed, Christ's presence is more than symbolic, as some Protestant theologians had argued, and Christ's presence is not "accidental"; that is, it does not arise as a mere accident of the bread and wine. Furthermore, it is maintained that not only Christ's corporeal substance, or body and blood, but his "whole nature" is present in the eucharist. After the Council of Trent, we find in the catechism of the Roman Catholic church that Christ's divinity and humanity are equally present in the sacrament. Finally, the Church had decreed that Christ is really present in the eucharist as a result of an act of transubstantiation: at the consecration, the substance of the bread and wine is changed into the substance of Christ. Despite this change of substance, however, the accidents of the bread and wine remain; while the phenomena persist, the underlying substance is miraculously transformed.

This view naturally gives rise to many conceptual problems. Foremost is the question of how something can come to be really present in another thing. On this point, Aquinas argued that the body and blood of Christ could not come to be really present in the sacrament by local motion; that is, the body and blood of Christ cannot move into and take up residence as it were under the attributes of the bread and wine. Rather, there must be a change of substance from within. It is this aspect of the consecration of the eucharist that demands true transubstantiation or a conversion of substance. This conversion of substance, moreover, must be both a conversion of one form into another form and the conversion of matter into different matter. Yet Aquinas also is clear that nothing natural can effect such a change.⁸⁰ A second question is how the accidents of the bread and wine, or at least some subset of them, can remain. How, in other words, can the appearances of the bread and wine persist even after the substance of the bread and wine is converted into the substance of Christ? It is important that they do so, according to Aquinas, because the consumption of human flesh and blood is horrible. The resolution of this difficulty is to say that Christ comes to be substantially present in the eucharist but that the “dimensive quantity,” flavor, and color of the bread and wine remain as “real accidents” that exist without a subject; in this way, the faithful can partake of the body and blood of Christ under the species of the bread and wine.⁸¹

We leave open the question whether the Thomistic account of transubstantiation is based on a sound metaphysics. Des Bosses’s concern here, though, should be obvious: if one accepts Leibniz’s view that reality ultimately belongs only to soul-like monads, how is a change of substance, or transubstantiation, possible at all?

10. Leibniz on Transubstantiation and the *Vinculum Substantiale*

Leibniz’s initial response to Des Bosses’s challenge is to reaffirm the position of his Lutheran faith: “for us there is no place for either the transubstantiation or consubstantiation of the bread, but only that Christ’s body is perceived at the same time that the bread is received, so that the presence alone of Christ’s body must be explained” (Letter 31). Leibniz acknowledges that explaining even this requires “something metaphysical” that goes beyond the phenomena—something analogous to the metaphysical union of soul and body, or the remote action of bodies on one another, as he speculates in the *Theodicy*.⁸² But his faith does not oblige him to uphold transubstantiation. Nevertheless, Leibniz goes on to address the “more difficult question” that Des Bosses has posed: “whether and how your

transubstantiation can be explained in my philosophy.” In order to account for the Catholic doctrine of real accidents, he suggests, transubstantiation would have to require (1) that the monads of the bread and wine are destroyed with respect to their primitive active and passive forces and replaced with the monads of the body and blood of Christ, and (2) that the derivative forces of the original monads remain, exhibiting the phenomena of the bread and wine in a constant manner.

Noteworthy about Leibniz’s response is the line he draws between the requirements of philosophy and those of revealed religion. From the perspective of the first, the theory of monads is left uncompromised. Leibniz’s claim on behalf of his monadology is that it is the philosophical theory that best accounts for the phenomena in a way consistent with the requirements of perfection, or divine wisdom. This leaves open the question of what revealed religion might require us to add to the theory. Here it is consistent with Leibniz’s position that confessional differences may lead one in different directions. A Lutheran may make one claim on behalf of God’s miraculous action; a Roman Catholic, another. But these would be claims that went beyond the theory of monads, which in principle could be adopted regardless of one’s faith. The only constraint on this strategy is that any miracles appealed to must be consistent with the theory of monads.

On this point Des Bosses immediately spots a flaw in Leibniz’s first attempt at an explanation of transubstantiation. Replying in Letter 32, Des Bosses argues that given the relation Leibniz himself assumes between the primitive and derivative forces of monads, namely, that the latter are modifications of the former, derivative forces cannot remain if the primitive forces are destroyed. For Leibniz, derivative forces are not existing entities in their own right but only “modes,” or ways in which primitive force is manifested. Hence, if primitive force is destroyed, so too must be derivative force. Des Bosses then astutely expands this point into a broader criticism of Leibniz’s account of extended matter. Even if Leibniz has successfully demonstrated that corporeal substance does not consist in extension alone, he believes that there is a determinate relation between a body’s extension and the derivative forces of its matter. As Des Bosses recounts the position, according to Leibniz, extension is “a certain repetition and continuation of a striving and resisting substance.” Again, the view supports the objection that, if this substance were destroyed, so would be its derivative forces and the extension they ground—contrary to Catholic doctrine. But, more generally, Des Bosses points to an explanatory gap in Leibniz’s theory of monads. As he frames his puzzlement in Letter 30: “I

do not yet understand from the things you have said . . . how mass, which is real and has a real diffusion or extension, can result from monads alone, which lack diffusion and extension.”⁸³

Des Bosses’s objections mark a turning point in the correspondence. When Leibniz finally responds to them, after a five-month silence, he adopts an entirely different approach to the problem of transubstantiation. In the version of Letter 34 received by Des Bosses, he sketches his solution in a brief paragraph:

Since bread, in fact, is a being by aggregation, that is, a substantiated being, its substantiality will consist in the union of monads. Accordingly, to destroy that union, on your view, it is not necessary to destroy the monads themselves.

Implicitly conceding to Des Bosses that the explanation of transubstantiation cannot turn on the destruction of monads, Leibniz appeals instead to a hypostatized union of the monads constituting the matter of the bread. If one assumes the existence of this union, which he identifies with the “substantiality” of the bread, a different explanation of transubstantiation can be given: it is not the monads themselves that are destroyed and replaced in the service of the eucharist, but their “union.”⁸⁴

Leibniz does not mention a substantial bond or *vinculum* here, but there is a clear echo of the passage deleted from the draft of Letter 4. Again, he refers to a union that is responsible for a new “substantiality” over and above that of the monads. In the immediately ensuing letters, the correspondents do not pursue this hypothesis in any detail. A year and a half later, however, in Letter 47, Des Bosses offers to send Leibniz a brief tract he is writing on the Peripatetic doctrine of corporeal substance. In it, he says, he will retain the expressions commonly used in the schools, but he also will “scarcely depart” from Leibniz’s own views, “which in most respects differ very little from those of Aristotle.”

Des Bosses’s offer prompts an immediate reply from Leibniz, who in Letter 48 provides the fullest statement to that point in the correspondence of his position on both corporeal substance and transubstantiation. Amid a flurry of new ideas, there appear the following claims defining the nature and function of the *vinculum substantiale*:

1. If corporeal substance is something real over and above monads, it presupposes a “real unifier” superadded to monads by God. This “unifying substance” from which corporeal substance arises is the *vinculum substantiale*.

2. Monads are not “ingredients” of the *vinculum* but only its “requisites,” and they are required not by an absolute or metaphysical necessity, but only by a natural necessity or “exigency.”
3. From the union of the primary matter of the monads, there arises the primary matter, or primitive passive power, of the corporeal substance; from the union of the monads’ entelechies, there arises the form, or primitive active power, of the corporeal substance.
4. Because these monads are in constant flux, so too are the form and matter of the corporeal substance. For this reason, a corporeal substance, unlike a soul, does not “persist as the same thing, with the same subject remaining.”
5. Given that the existence of a corporeal substance depends essentially on the presence of its substantial bond, if the latter is destroyed, so too will be the corporeal substance. Conversely, the addition of a new substantial bond to a group of monads can create a new corporeal substance from them.

This extraordinary set of claims opens a rich new set of possibilities for the development of Leibniz’s philosophy. Several points should be noted.

First, Leibniz explicitly appeals to the *vinculum* as an explanation of the reality of corporeal substance. Consistent with the passage deleted from Letter 4, he maintains that corporeal substance can exist only if a “real unifier” or “unifying substance” is superadded to monads. In his terminology, the *vinculum* thereby “realizes” the phenomena of bodies, or brings it about that the appearances of bodies correspond to an underlying corporeal reality.

Second, as conceived by Leibniz, the *vinculum* serves as a solution to the problem of transubstantiation by being a solution to the problem of corporeal substance. Given Des Bosses’s decisive objection to his initial attempt at an explanation of transubstantiation, Leibniz now accepts that sense can be made of the claim that God miraculously transforms the substance of the bread and wine into the substance of Christ, only if there exist corporeal substances in addition to monads. If there are such substances, then at the moment of the consecration God destroys the corporeal substances of the bread and wine by destroying their substantial bonds, and replaces them with the substantial bond of the corporeal substance of Christ. In this way, there is a genuine change of substance (the substantial bond) with no change in the monads or their phenomena.

Third, Leibniz is clear that he himself affirms neither the truth of transubstantiation nor the reality of corporeal substance. He simply presents

Des Bosses with a pair of alternatives, each of which is consistent with the theory of monads:

one of two things must be said: either bodies are mere phenomena, and so extension also will be only a phenomenon, and monads alone will be real, but with a union supplied by the operation of the perceiving soul on the phenomenon; or, if faith drives us to corporeal substances, this substance consists in that unifying reality, which adds *something absolute* (and therefore substantial), albeit impermanent, to the things to be unified.

On the basis of this passage alone, one would have to conclude that Leibniz himself sees little reason to extend the theory of monads via the hypothesis of a *vinculum substantiale*. If the only reason for its postulation is the explanation of transubstantiation, and only the faith of a Roman Catholic demands this, then Leibniz would have no reason to embrace the hypothesis. But we are only at the beginning of his efforts to think through the significance of the *vinculum* and its possible place in his metaphysics.

The necessity of these further developments can be traced to the instability of Leibniz's initial conception of the *vinculum*. In its very definition, the *vinculum* is an ontological paradox: it is a *substantial* thing that is also a *relation*; it unifies monads in a corporeal substance that lacks the essential property of persistence.⁸⁵ How precisely the *vinculum* gives rise to a corporeal substance also remains a mystery. On the face of it, it is plausible to see it as underwriting an elaboration of the M-Composite View. Accepting that a corporeal substance consists of a dominant monad and a mass of subordinate monads constitutive of its body, and acknowledging that these monads by themselves lack a per se unity, one might think that it is necessary only to add to them a "real unifier" in order to generate a composite substance that possesses the requisite unity. In principle, this is what Leibniz attempts to do. But the corporeal substance that results from the *vinculum* cannot be understood merely as a special sort of aggregate. As Leibniz emphasizes in later letters, if a corporeal substance were an aggregate whose "ingredients" were monads, then it would lack both an independent existence and a true unity. The *vinculum* is introduced as the ground of the substantiality and unity. Yet the *vinculum* is not the corporeal substance: that, according to Leibniz, is the union of the active and passive powers of the requisite monads, which itself is in constant flux, because the monads themselves are.

Clearly, this initial conception of the *vinculum* faces serious challenges. More than this, it fails to satisfy Des Bosses as an explanation of transub-

stantiation. In Letter 49 he objects to Leibniz that the “absolute thing” added to monads should be understood as an accident rather than as a substance in its own right. As the unifying principle of a composite substance, a *vinculum* presupposes the existence of monads, and whatever presupposes the existence of substance must be an accident. For this reason, he believes, Leibniz’s hypothesis of the destruction of substantial bonds fails as an explanation of transubstantiation. Insofar as the same monads remain, there is no change of substance; hence, no transubstantiation. If, in the miracle of the eucharist, monads were destroyed and replaced with other monads, a necessary condition for transubstantiation would be met. However, Des Bosses expresses reservations on other grounds about the metaphysical adequacy of the theory of monads. He is especially critical of the way in which the theory goes against deeply held beliefs about the reality of the material world. The “basic principles of all philosophers, along with the prejudices of the ignorant,” support the assumption that “there is something more in body than phenomena, that is, something more than continuous dreams, however perfectly they may agree with each other.”⁸⁶ Accepting Leibniz’s point that if monads alone are real, bodies will be mere phenomena, Des Bosses replies in effect: so much the worse for the theory of monads. Although Des Bosses grants that monads should be understood as substances, he rejects Leibniz’s assumption that they are the fundamental things in terms of which the existence of everything else, including corporeal substance, is to be explained. In Des Bosses’s view, this assumption reverses the proper order of ontological explanation: in terms of existence, monads should be understood as abstractions from the prior “physical actuality” of corporeal substance.⁸⁷

Leibniz responds forcefully to both of Des Bosses’s objections. On the issue of transubstantiation, he is adamant in dismissing Des Bosses’s construal of the *vinculum* as an accident. If Leibniz were to grant this, he would have to accept that transubstantiation involved the destruction of monads, which, for reasons already considered, would mean acceding to the Church’s interpretation of the appearances of the bread and wine as “real accidents” that endure without a subject. In addition, Leibniz has general reasons for resisting the classification of the *vinculum* as an accident, and more specifically, as a relation. Leibniz’s position throughout his career is that relations are not real entities but merely “beings of reason” (*entia rationis*); they are “modes of conceiving,” or ways in which a mind apprehends substantial things in relation to one another. Again, the paradoxical character of the *vinculum* is evident. In both name and function—a “bond” or “union” of monads—it appears to be a kind of relation. Yet,

for just this reason, Leibniz must insist that it is a *substantial* bond, which determines the per se unity of a corporeal substance, and whose destruction and replacement alone account for transubstantiation.

Leibniz is equally firm in resisting Des Bosses's attempt to reverse the order of ontological explanation, making monads derivative from the prior reality of corporeal substance. He expresses his satisfaction with the theory of monads as a foundational metaphysics and defends its adequacy as an explanation both of commonsense beliefs about the reality of bodies and of the real presence of Christ in the eucharist. Acknowledging that if monads alone are real, bodies will be mere phenomena, Leibniz suggests two ways in which phenomena nonetheless can be distinguished as "true." With respect to ordinary judgments about the existence of bodies, he adopts a broadly phenomenalist stance in Letter 52: "It is true that the things that happen in the soul must agree with those that happen outside the soul; but for this it is sufficient that those things that happen in one soul correspond both among themselves and with those things that happen in any other soul; and there is no need to posit something outside of all souls or monads. According to this hypothesis, when we say that Socrates is sitting, nothing more is signified than that those things that we understand by 'Socrates' and 'sitting' are appearing to us and to others to whom it pertains."

There should be nothing surprising about this approach, given Leibniz's distinction between what is said by the vulgar and what is said in metaphysical rigor. Just as he denies that it is literally true that the sun rises, or that substances causally interact with one another, while at the same time upholding the propriety of talking as if this were true, so he maintains that it is legitimate to affirm the existence of bodies corresponding to our veridical perceptions of them, when in fact a metaphysically rigorous account would appeal to the harmonized perceptions of monads alone.⁸⁸

Leibniz proposes a second account of "true phenomena" that he applies to the explanation of the real presence of Christ in the eucharist. In Letter 57 he suggests that if monads alone are substances, then it will have to be said that "the substance of bodies consists in true phenomena, namely, those that God himself perceives in them through knowledge of vision [*scientia visionis*], and likewise angels and the blessed, to whom it is given to see things truly. And thus, God, with the blessed, perceives the body of Christ, when bread and wine appear to us."⁸⁹ Leibniz's fullest explanation of the distinction between the phenomena perceived by finite minds and those perceived by God appears in a set of private reflections traditionally associated with Letter 48. There he suggests that "the reality of bodies,

space, motion, and time seems to consist in this: that they are the phenomena of God, that is, the object of his knowledge of vision.” He goes on to highlight two features of the phenomenal knowledge attributed to God. First, in contrast to any finite monad, which represents things only partially and from a single perspective, God “sees things exactly such as they are according to geometrical truth, although likewise he also knows how each thing appears to every other, and thus he contains in himself eminently all the other appearances.” Second, by virtue of the knowledge God has of the perspectival representations of monads, he also has knowledge of the contingent relations among all monads: “God not only considers single monads and the modifications of any monad whatsoever, but he also sees their relations, and the reality of relations and truths consists in this. Foremost among these relations are duration (or the order of successive things), situation (or the order of coexisting), and intercourse (or reciprocal action), admittedly provided that the ideal dependence of monads on one another is conceived. . . . Through these [relations], things seem to us to form a unity, and truths in fact can be expressed concerning the whole that are also valid according to God.”

Leibniz does not elaborate on this account, so we are limited in the conclusions we can draw from it. At the very least, he proposes an explanation of the relations among monads that is premised on God’s knowledge of the phenomena perceived by monads and consistent with his general theory of relations. As Leibniz understands it, the monads of a world are united by relations of “duration,” “situation,” and “intercourse” (or “ideal causation”);⁹⁰ however, these relations are determined solely by God’s “knowledge of vision.” Most interesting about the development of Leibniz’s thoughts in this study is that after laying out the above account, he immediately moves to consider how “over and above these real relations, a more perfect relation can be conceived through which a single new substance arises from many substances.” In the next few sentences Leibniz rehearses the principal claims he makes on behalf of the *vinculum*. Ontological priority is assigned to monads alone. If there exist substances over and above monads, they can exist only in virtue of “some new substantiality, or substantial bond,” added to them, and this “substantiality” presupposes not simply divine knowledge but an additional act of divine will. Leibniz insists that substantial bonds are limited to those monads whose perceptions allow them to be identified as a soul, or dominant monad, and the constituent monads of its body; for this reason, the substantial bond of monads also serves as the “metaphysical bond of soul and body, which constitute one complete substance.”

Leibniz still faces grave problems in articulating his conception of the substantial bond. How can he affirm the existence of a relation that in some sense is also a substance? What account can he give of the capacity of this bond to unite a plurality of monads in a composite substance? From his own perspective, Leibniz seems to have every reason to dismiss these problems as insurmountable. Yet he does not. On the contrary, pressed by Des Bosses's objections, in the fall of 1712 he revises his original conception of the *vinculum*. The changes he makes can be seen as a direct response to Des Bosses's emphasis on the relational, and hence accidental, character of the substantial bond. This was a reasonable point for Des Bosses to press, since Leibniz's original account characterized corporeal substance as an entity whose primitive active and passive powers result from those of its constituent monads. On this account, an extension of the M-Composite View, the substantial bond most clearly serves a relational function, joining a plurality of monads in a unitary corporeal substance.

Beginning with Letter 54, Leibniz defends a significantly different account of the *vinculum*, which emphasizes its character as a substance as opposed to a relation. From here on he identifies corporeal substance not with a unified composite of monads but with the *vinculum* itself. According to this account, any substantial bond is naturally accompanied by monads whose perceptions identify them as a dominant monad and the subordinated monads of its body; however, these monads are not metaphysically necessary for the existence of the substantial bond *or* the composite substance. The monads can be removed by God, and still the composite substance can remain. Accordingly, a composite substance is not, in fact, a bonded unity of monads. Rather, in Leibniz's words, the substantial bond "formally constitutes composite substance, which the monads, since they are able to be present or absent while the composite substance remains, do not produce."⁹¹

While insisting that the *vinculum* must be regarded as something absolute or substantial, Leibniz continues to maintain that "corporeal substances or substantial bonds are subject to generation and corruption."⁹² For this reason, composite substance fails to meet the strictest conditions on a substantial existence, a point recognized by Leibniz in Letter 54. There he describes it as a "substantiated per se unity," which is "a middle thing between a simple substance, which chiefly deserves the name 'substance,' and a modification. Simple substance is perpetual; a substantiated thing can arise and perish, and be changed." At this point Des Bosses again helpfully intervenes. Noting Leibniz's rejection of the Peripatetic doctrine of the generation and corruption of forms, he suggests in Letter 58 that

Leibniz has no reason to embrace this doctrine in the case of the *vinculum*. Acknowledging this point, Leibniz reverses his position in Letter 59:

having considered the matter, I change my opinion to this extent: I now think that nothing absurd arises, if the substantial bond, or the substance itself of the composite, is also said to be ingenerable and incorruptible, because I think that no corporeal substance should really be admitted except where there is an organic body with a dominant monad, or a living thing, that is, an animal, or something analogous to an animal. . . . Since, therefore, as you know, I deny that not only the soul but also the animal dies, I shall accordingly say that the substantial bond, or the substance of the animated body, does not arise and perish naturally, but that, since it is something absolute, it only varies according to the changes of the animal.

A final step is taken in Letter 62, in which Leibniz endows the *vinculum* with primitive active and passive force. In order “to produce reality in phenomena outside of perceiving things,” he argues, composite substance must consist in primitive active and passive power, or “what is called the primary matter and substantial form of the composite.” More explicitly, he writes in Letter 69: “This bond will be the principle of action of the composite substance; and he who admits this composite substance . . . will also admit this bond.”

Together, these developments bring the *vinculum* close to meeting the full set of conditions on a substantial existence. In two important respects, however, it remains distinct from the monad. First, nowhere does Leibniz ascribe to the *vinculum* a monad’s essential properties of perception and appetite. As the substance of a living body, the *vinculum* is not a soul-like substance. In fact, Leibniz claims that a distinguishing feature of composite substance is that its primary matter is not reducible to the passive power of monads; instead, this primary matter consists in a “principle of resistance” that is added to the “active principle or motive force.”⁹³ Second, in the case of the *vinculum*, Leibniz drops his prohibition on the causal interaction of substances. If the world consists of real corporeal substances, identified with substantial bonds, it will also include real causal interactions among those substances, a point Leibniz elsewhere denies even in the case of body-body causation.⁹⁴ This development has consequences for his conception of the monad as well, since he argues that the modifications of a substantial bond are naturally an “echo” of those of the dominant monad, suggesting some influence of the latter on the former.⁹⁵

Leibniz's final account of the *vinculum* renders his theory of corporeal substance a version of the Unity View, according to which a corporeal substance is properly conceived not as a composite of other independently existing substances but as a unity of primitive active and passive powers, neither of which exists independently of the substance itself. These primitive active and passive powers ground real physical properties of the substance (action, resistance, impenetrability), thereby aligning the position with the commonsense realism defended by Des Bosses.

Left unclear on this account is the relation of the *vinculum* to the monads that Leibniz previously identified with the soul and body (or secondary matter) of a living creature. Leibniz holds that the modifications of the active and passive powers of the *vinculum* are causally dependent upon those of the monads. Indeed, he admits in Letter 66 that in the absence of such an influence "there will be no reason why [the *vinculum*] can be called the bond of [monads]." This admission highlights how far Leibniz has moved in his understanding of the *vinculum*. Originally, the substantial bond was introduced as the basis of a real union among monads. Now, Leibniz claims that the substantial bond can be called a "bond" only if the monads operate on it. To all appearances, the *vinculum* itself does nothing by way of providing a real union to the monads constitutive of an organism. And in fact there is no reason to think that it should. With the *vinculum* and corporeal substance now identified, there is no longer any need to impose a per se unity on the monads of the body. That unity is located in the *vinculum* itself, which persists as a corporeal substance, whether or not there exist monads with appropriately ordered perceptions. Given the perfection and harmony of the world, there will exist such monads, but on Leibniz's account they are no longer identified with the corporeal substance. Hence there is no special problem about their unity.

This position is on full display in Leibniz's last two main contributions to the correspondence. In Letter 70, composed in January 1716, he returns to the topic of corporeal substance and proposes to address it as if beginning anew, "with prejudices set aside as much as possible." He stresses that in his treatment of corporeal substance he is "absolutely of the same opinion as the Scholastics": "their primary matter and substantial form, namely the primitive active and passive powers of the composite, and the complete thing resulting from these, are really that substantial bond that I am urging." Continuing, he tells Des Bosses: "my doctrine of composite substance seems to be the very doctrine of the Peripatetic school, except that their doctrine does not recognize monads. But I add them, with no detriment to the doctrine itself. You will hardly find another difference, even if you are bent on doing so."

The same stance is affirmed in Letter 71, the final letter of the correspondence. Leibniz describes himself as offering an “emended Peripatetic philosophy,” which he deduces from two propositions: that composite substance exists and imparts reality to phenomena, and that substance naturally neither arises nor perishes. In his words: “I do not believe that I depart from the Scholastic doctrine of corporeal substances except in this one thing, that I do away with the generation and corruption of true substances, whether simple or composite, since I find it to be neither necessary nor explicable.” The essence of a composite substance is identified with the substantial bond, to which belong substantial form and primary matter, or primitive active and passive power. This substance, or substantial bond, “requires monads, but does not involve them essentially, since it can exist without monads and monads without it.” Accordingly, Leibniz concludes, “Composite substance does not consist formally in monads and their subordination, for then it would be a mere aggregate, that is, an accidental being; rather, it consists in primitive active and passive force.”

From this primitive active and passive force, he continues, “arise the qualities and the actions and passions of the composite, which are perceived by the senses, if they are assumed to be more than phenomena.” Included among the properties of body on this account is that of being a real continuum: “in primary matter . . . or in the passive [power] of a composite substance, there is involved the foundation of continuity, from which it follows that a true continuum arises from composite substances placed next to each other, unless God removes the extension supernaturally.” The affirmation of the reality of continuity marks one of the sharpest contrasts between the theory of monads and the “emended Peripatetic philosophy.” Whereas the former takes the continuum to be merely ideal, the form of our representation of space, the latter embraces a robust realism about the continuity of matter: “Real continuity can arise only from a substantial bond. If nothing substantial existed besides monads, that is, if composites were mere phenomena, then extension itself would be nothing but a phenomenon resulting from coordinated simultaneous appearances.”⁹⁶

In his last two letters, Leibniz goes out of his way to emphasize to Des Bosses that with the addition of the hypothesis of the *vinculum*, the theory of monads can accommodate the commonsense realism of the Peripatetic doctrine of corporeal substance. He also continues to defend his hypothesis as the most coherent explanation of the Catholic dogma of transubstantiation. Yet while Leibniz stresses the adequacy of his proposal in these respects, he gives no sign of having moved closer to embracing the Peripatetic view as his own. In terms of saving the phenomena, he believes, the theory of monads is in no weaker a position than commonsense realism.

"If bodies were mere phenomena," he writes in Letter 71, "they would not deceive the senses on account of that. For the senses do not make known anything about metaphysical matters." Metaphysical matters, such as the existence of a substantial bond, must be settled on other grounds, and here Leibniz acknowledges no significant change in his position. Because he has dealt with the topic only intermittently, he tells Des Bosses, there may sometimes be the appearance of inconsistency in what he writes. Nevertheless, he reassures his friend that "when the matter is examined, it will be more in the mode of expression than in the account."

11. Leibniz's Final Metaphysics: Idealism or Realism?

Given that Leibniz's correspondence with Des Bosses extends over the last ten years of his life and that his final letter was written less than six months before his death, one might hope to find in the correspondence a definitive statement of his metaphysics. Unfortunately, this hope remains unfulfilled. The exchange takes the form of a protracted dialogue in which Leibniz presents a variety of positions in response to the questions and criticisms of Des Bosses. Rarely does Leibniz advance his own views as explicitly or as forcefully as he does in the De Volder correspondence. Nevertheless, the Des Bosses correspondence reveals more fully than any other source the ontological options that Leibniz believes open to him and confirms what is arguably the main tendency of his thought.

As we have seen, a central problem facing Leibniz and his interpreters concerns the extension of the term "substance." Does this term apply to certain kinds of bodies, "corporeal substances," or to soul-like simple substances alone? Leibniz's ambivalence on this point extends throughout his career and into his correspondence with Des Bosses. In the latter half of their correspondence, Leibniz presents Des Bosses with a choice between two rival metaphysical systems. The first, a species of idealism, assigns an absolute existence to monads alone. In themselves, monads stand in no immediate spatiotemporal relations. Space and time are ideal relations that order the realm of phenomena, or the appearances of bodies.⁹⁷ Matter (that is, secondary matter, or the stuff of bodies) has no reality over and above that of monads. Bodies are merely the contents of the coordinated perceptions of monads or else identical with monads themselves.⁹⁸

Opposed to this is the position Leibniz refers to as his "emended Peripatetic philosophy." He arrives at it by adding to the theory of monads the hypothesis of a substantial bond, which according to his final conception of it is both a corporeal substance in its own right and the principle of unity for an ever-changing set of monads. In contrast to the position defended by Des Bosses, monads are fundamental elements of nature, but they are not

the only such elements. In terms of their existence, substantial bonds are equally fundamental, and they confer on matter a reality that is not reducible to that of monads, and properties such as continuity that do not result from monads.

In some of his letters, Leibniz appears content to present Des Bosses with the choice between these two theories and to explain why he believes that the explanation of transubstantiation requires the postulation of substantial bonds, and hence the reality of bodies. He adopts this approach in Letter 48, which we considered above, as well as in Letter 57, from January 1713. Here Leibniz's irenic tendencies are fully in view: if one believes in transubstantiation and also accepts the theory of monads, then one must adopt substantial bonds; if, on the other hand, one's faith does not require the affirmation of transubstantiation, then one may rest with monads alone, with bodies reduced to phenomena. Given this choice, it is natural to think that Leibniz would opt for the latter view. Since he does not accept transubstantiation as a dogma of faith, he would be unlikely to affirm the existence of substantial bonds on these grounds. We should not dismiss too quickly, however, the possibility that Leibniz may have had other reasons for upholding the existence of substantial bonds. The topic of corporeal substance was of concern to him long before his discussion of transubstantiation with Des Bosses. Since he defends substantial bonds as a means of preserving the reality of corporeal substance, and not simply as an explanation of transubstantiation, it would be premature to conclude that he rejects their existence outright.⁹⁹

The strongest evidence that Leibniz's own position is the idealism of the theory of monads appears in Letter 52:

I regard the explanation of all phenomena solely through the perceptions of monads agreeing among themselves, with corporeal substance excluded, to be useful for a fundamental investigation of things. In this way of explaining things, space becomes the order of coexisting phenomena, as time is the order of successive phenomena, and there is no absolute or spatial nearness or distance between monads. To say that they are crowded together in a point or disseminated in space is to employ certain fictions of our mind when we willingly seek to imagine things that can only be understood. No extension or composition of the continuum is involved in this account either, and all the problems about points disappear.

The view sketched here is similar to that advanced in the final letters to De Volder, and there is reason to see it as bedrock in Leibniz's investigations of nature. The theory of monads is to be preferred over any other ac-

count because it is the simplest theory consistent with the phenomena. All the phenomena of nature are accounted for, and nothing is postulated in the theory that is explanatorily idle.¹⁰⁰

For the moment we defer judgment on the philosophical adequacy of the theory of monads. What bears stressing is that, even if Leibniz were to accept the theory of monads as an adequate philosophical theory, this acceptance would not necessarily mean that the theory corresponded to his final metaphysics. In principle, Leibniz also acknowledges extraphilosophical reasons as relevant to the decision whether or not to adopt a particular metaphysics. For a Roman Catholic, the miracle of transubstantiation would be such a reason. Although the theory of monads is consistent with the phenomena, in which there is no observed change in the appearances of the bread and wine, it cannot account for the conversion of substance. Hence, if the possibility of the miracle is to be explained, the theory of monads must be emended. Although Leibniz himself does not accept transubstantiation, he may recognize similar reasons, originating in nonnatural or “metaphysical” facts, for extending the theory of monads. In Letter 55 he comes close to admitting this to Des Bosses: “[The hypothesis of bodies reduced to phenomena alone] is pleasing in many ways. We do not need anything other than monads and their internal modifications, with supernatural things excluded from philosophy. But I fear that we cannot explain the mystery of the incarnation and other things unless real bonds or unions are accepted.”

If an adequate metaphysical theory must account for the possibility of the incarnation, that is, the real union of divine and human natures in Jesus Christ, then clearly the theory of monads by itself will not suffice. Here, as in the case of transubstantiation, some further *vinculum* is required. Such an admission significantly complicates our assessment of the final form of Leibniz’s metaphysics. If we assume for the moment the philosophical adequacy of the theory of monads, then Leibniz is faced with a choice from among the following positions: (1) the theory of monads can be upheld as a complete metaphysics, thereby rebuffing the explanatory demands of revealed theology; (2) the theory of monads can be upheld while allowing its incompleteness as a metaphysics: it is an adequate philosophical theory, but some theological questions take us beyond philosophy; (3) the theory of monads can be extended by the addition of metaphysical principles of union.

In a few texts, Leibniz comes close to supporting (1), but it is unlikely that this is his considered position.¹⁰¹ Leibniz is no theological radical. He is committed to upholding the claims of revealed theology and would pre-

sumably reject any attempt to deny the truthfulness of those claims. How he would decide between (2) and (3) is less straightforward. To accept either option is to affirm the incompleteness of the theory of monads as a metaphysics. One's understanding of reality must allow for the existence of more than soul-like monads and their harmonious perceptions. It is worth underlining that Leibniz could accept such a conclusion without explicitly affirming the existence of real unions, that is, adopting option (3). The alternative would be to remain agnostic on this point: he could continue to insist on the adequacy of the theory of monads as a metaphysics of nature and take no stand on whether other entities must be introduced in order to account for the supernatural truths of religion.

Leibniz's reply to Tournemine on the need for a real union of soul and body provides an example of this approach. His preferred way of addressing the point is to defend the phenomenal adequacy of the theory of monads while insisting that he "does not deny" a further principle of union. The evaluation of this response is complicated by the fact that it again involves an assessment of Leibniz's stance toward the doctrines of the Catholic church. The point on which Tournemine insists, that the human being, body and soul, is an *unum per se*, reflects the declaration of the Fifth Lateran Council, as Leibniz notes in an earlier letter to Arnauld (G.ii.75/LA 93). Thus, his agnosticism in this case is unsurprising. As in his discussion of transubstantiation with Des Bosses, it amounts to an admission that he does not reject Roman Catholics' interpreting his position in this way. The point stands, though, that the acceptance of theological doctrines may entail substantive metaphysical commitments.¹⁰²

Aside from issues raised by revealed theology, there remains the question whether Leibniz's final metaphysics reflects his recognition of philosophical reasons for extending the theory of monads to include the hypothesis of substantial bonds, and hence the reality of corporeal substance. Without a doubt, Leibniz's Aristotelian sympathies inclined him toward affirming the substantiality of living bodies such as plants and animals. But what can we conclude from this? Does it follow that his final metaphysics is an "emended Peripatetic philosophy" as opposed to the idealism of the theory of monads?

It is unlikely that this question can be settled on textual grounds alone. There are too many passages that can be cited on both sides of the issue, a circumstance that has led some to express skepticism about the coherence of Leibniz's later philosophy.¹⁰³ Such pessimism, we believe, is unwarranted. Although certainty may lie outside our grasp, attention to the development of Leibniz's philosophy can bring clarity to our understanding

of his position. As Leibniz himself says, when the matter is examined, any appearance of inconsistency will be “more in the mode of expression than in the account.”

The Des Bosses correspondence is responsible for a critical advance in Leibniz’s philosophy. Before his exchange with Des Bosses, Leibniz had spoken often of corporeal substance, but he had failed to tackle in a concerted way the problem of reconciling the reality of corporeal substance with the theory of monads.¹⁰⁴ His key insight, evident in the draft of his second letter to Des Bosses, is that a reconciliation is possible only if room is made for a “real union” of the soul or dominant monad and the subordinated monads of its body. It is worth recounting why this is so. The governing idea is that for anything to qualify as a substance it must possess the property of being an *unum per se*. No mere plurality of monads can possess this property. By themselves, monads are metaphysically isolated individuals (each is, as it were, “a world apart”), whose relations are limited to correlations among the contents of their perceptions. As Leibniz writes in his notes for Letter 57, “I acknowledge no modes of monads except perceptions and appetites, or tendencies to new perceptions; and through these alone it happens that souls or monads are subordinated to one another—that is, subordinated representatively, with no real influx between them.”

Relations of this sort are sufficient to designate a set of monads as a “being by aggregation,” but they fall short of making it an *unum per se*. The aggregate is composed of unities, but it itself lacks an intrinsic unity; it is a plurality of things united by mind-dependent relations. Even with this point granted, it might still be objected that there is something special about the relation between a soul and the subordinated monads of its body—something that warrants our designating their composite a “substance.” Leibniz stresses that the embodied creature, as much as the soul itself, possesses an identity through change. Although the soul and the subordinated monads of its body lack an intrinsic unity, there is a sense in which their aggregate persists, despite a constant flux of monads. Given this, it might be supposed that in this case Leibniz intended to loosen the conditions on what counts as a substance. If living bodies, plants and animals, are paradigmatic substances, then it might be the criterion of *per se* unity that has to go, rather than the judgment that there exist corporeal substances. If we can define a notion of persistence on the basis of relations of monadic subordination, why shouldn’t that be enough to call the relevant aggregates “substances”?

However appealing this idea, the Des Bosses correspondence demon-

strates that it is not Leibniz's response to the problem of corporeal substance. By the beginning of the exchange, Leibniz has reached the conclusion that, given the foundational truth of the theory of monads, the reality of corporeal substance can be upheld only if one acknowledges the existence of a "real union," or substantial bond. As he makes the point in his final letter, "Composite substance does not consist formally in monads and their subordination, for then it would be a mere aggregate, that is, an accidental being; rather, it consists in primitive active and passive force." Over the course of his correspondence with Des Bosses, Leibniz's conception of the substantial bond undergoes an important transformation. He begins with the intuition that the role of the substantial bond is to provide an aggregate of monads with a "real union," such that they together comprise a composite substance. On this account, the substance would be the *bonded monads*, whose perceptions identify them as a dominant monad and the subordinated monads of its body. Under Des Bosses's questioning, Leibniz is forced to revise his position, ultimately identifying corporeal substance with the substantial bond itself, now endowed with primitive active and passive force, or form and primary matter. Thereafter Leibniz maintains that corporeal substance has no essential relation to monads: the former can exist as a substance, independently of the existence of monads; and monads can exist in relations of domination and subordination, independently of the existence of corporeal substance.

This development alters in a decisive way the balance between realism and idealism in Leibniz's thought. A commitment to realism concerning corporeal substance becomes a commitment to the existence of an entity, the *vinculum*, that has no essential connection to monads. Because *it* is the corporeal substance, it is no longer needed as a unifier of monads. In effect, we are presented with a metaphysics in which any living body is accounted for twice ontologically: once as an organized mass of monads, once as a corporeal substance. To avoid this duplication of ontological commitment, Leibniz could move in either of two directions. He could drop monads altogether and uphold the existence of corporeal substances, conceived according to the Unity View. In this case, his world, like Des Bosses's, would be populated by Aristotelian living bodies, each of which consisted of a substantial form and primary matter, neither of which existed independently of a concrete substance. Alternatively, Leibniz could drop corporeal substances and cleave to the idealism of the theory of monads. What seems unmotivated, however, is the "emended Peripatetic philosophy," which seeks to uphold the existence of both monads and corporeal substances.

Leibniz presents the latter to Des Bosses as an ontological option: he does not espouse the theory as his own. It is significant that Leibniz does not even consider renouncing monads in favor of a pure ontology of corporeal substances. To the extent that he tries to account for the latter, it is as an addition to the theory of monads. This is the pivotal point on which a judgment about his final metaphysics must rest. Leibniz insists repeatedly that the theory of monads is, as a metaphysics of nature, explanatorily adequate. It satisfactorily accounts for all the phenomena, including such basic facts as the soul's embodiment (explained in terms of monadic subordination) and the veridicality of perception (explained in terms of the agreement among monadic perceptions). There is no phenomenon left unexplained that would be explained by the postulation of corporeal substances. From this perspective, corporeal substances are explanatorily otiose. In his notes to Letter 57, Leibniz makes the case succinctly: "*The hypothesis of mere monads* has this distinction, that, with it assumed, nothing remains unexplained, nor is anything assumed except what is proven and what must be assumed necessarily."

The realist may object here, as Des Bosses does, that a denial of the existence of corporeal substance is at odds with commonsense beliefs about the reality of the material world. If we know anything, the realist urges, it is that some bodies are genuine substances: living creatures that endure through change. So, it seems, Leibniz will reply, and so it is, to a degree. Certain instances of monadic subordination are stable configurations, in which a soul represents a changing collection of other monads as its enduring body. This fact accounts for the phenomenon of persistence; nothing more is explained if we claim that these monads are naturally accompanied by a *vinculum*, which really is the corporeal substance. Leibniz's philosophy, properly understood, does not trade in such metaphysical extravagances. Common parlance is not the measure of ontological commitment. We often say that things are such-and-such when, in fact, the underlying reality is quite different. Bodies are colored; they interact causally with other bodies and with souls; remote bodies attract each other across the infinite expanses of space—all of these things we say, and to an extent we understand what we say; yet none is literally true, according to Leibniz's philosophy. The philosophical argument for the reality of corporeal substance is no stronger than the argument for intersubstantial causation. As in that case, it is entirely consistent with our and Leibniz's common talk of "living bodies," "organisms," and even "corporeal substances" that the underlying reality is quite different: a world of monads and their harmonized perceptions.¹⁰⁵

That is where philosophy leads us. Yet it is not necessarily the path that Leibniz follows. The Des Bosses correspondence shows how theological concerns may point one in a different direction, toward “real unions” or “substantial bonds” that are posited to explain metaphysical facts (such as transubstantiation), which in principle are unobservable. If Leibniz recognizes such facts, then his final metaphysics may include a commitment to the reality of corporeal substance; if he does not, then the case for his idealism is overwhelming.¹⁰⁶

The Leibniz–Des Bosses Correspondence

Des Bosses to Leibniz

Illustrissime Domine

Pax Christi

Maximae mihi voluptati fuit, et quod tumultuarii colloquii nuperi memor uti opella mea voluisti, et quod pro Ptolemaei Apographo, ejusdem exhibuisti mihi legendum Autographum. Si tam tibi probatur liber iste, quam ego libens eum a te desiderari intellexi, habet quod sibi gratuletur autor, eritque censurae securus si tuum abstulerit suffragium quod omnium instar esse potest.

Sed narro tibi, vir illustrissime, hic ipse Ptolemaeus, qui de tua in se benevolentia tantopere gloriatur, fortasse, dum haec legis, societatis nostrae Praepositus est Generalis; Nam R. P. Thyrsus Gonzalez, uti dubio procul audiveris, non ita pridem decessit e vita, jamque comitia quibus successor ei creandus est decima septima hujus mensis Romae coepta sunt. Imo hic ipse dies quo scribo, electioni faciendae constitutus esse putatur. Omnes sane nuncii qui Roma afferebantur, nil nisi de Ptolemaeo loquebantur. Quod ego certe, tum tua, tum Philosophiae causa velim: tua quidem, ut amicitiam tuam honeste collocatam videas; philosophiae vero, quod, uti ex ejus opere perspicies, non ita immitis est Peripateticus ut aliorum philosophorum, maxime recentiorum praeclare cogitata in Lycaeii fines admittere pertimescat. Nam de tuis quid dicam? Haec vero ambabus ulnis amplectitur; nec immerito: nam si eos qui causam Peripateticam non labefactant quidem, at nec promovent, benigne satis accepit, te, qui Stagyræ jam prope fatiscentem tam strenue fulcis, ejusque pmoeria dilatas, et honestam ei cum adversariis nimium quantum ferocibus pacem concilias, quo affectu excipi non decebat? Quod si Ptolemaeus, antequam librum suum in lucem ederet tuas de activo passivoque principio meditationes vidisset expendissetque, nec ipse de formis substantialibus aliter locuturus fuerat, nec fassurus (quod ei excidisse nollem) illas sola autoritate posse comprobari, in quo, uti et in atomis, aliisque nonnullis causam bonam praevaricari mihi semper visus est. Ausim dicere, si Hermolao Barbaro Genius olim tuus astitisset, super Entelechiaei notione, sine cujus vocis intellectu Aristotelis systema merum esse aenigma previdebat, daemonem nunquam fuerat consulturus. Tua vocabuli istius interpretatio magis ad Philosophiae veteris et novae consensum profutura videtur quam opera

1. Des Bosses to Leibniz¹

[Hildesheim, 25 January 1706]

Most Distinguished Sir,
The Peace of Christ,

I was very pleased both that remembering our recent hurried conversation you wanted to take advantage of my meager efforts, and that in exchange for the copy of Tolomei's book you presented me with the original of it to read.² If this book is esteemed by you as much as I have happily seen you wish for it, the author will be able to congratulate himself, and if it should receive your approval, which is equal to that of everyone, it will be safe from criticism.

But I tell you, most distinguished Sir, that this very Tolomei, who boasts so much of your goodwill toward him, may be, when you read this, the superior general of our society; for as you no doubt will have heard, the Reverend Father Tirso González recently departed this life, and already, on the seventeenth of this month, the congregation to choose his successor began in Rome.³ Indeed, it is believed that this very day on which I write has been settled as the day of the election; all the reports coming back from Rome certainly have spoken of nothing but Tolomei. I would certainly prefer this outcome, both for your sake and for the sake of philosophy: for you, so that you may see your friendship properly positioned; for philosophy, because, as you will see from his work, he is not so severe a Peripatetic that he is afraid to allow the views of other philosophers, especially those of the moderns, within the boundaries of the Lyceum. And what shall I say of your views? These he certainly embraces wholeheartedly, and not undeservedly, for if he accepts in a friendly enough manner those who do not work against the Peripatetic cause but also do not advance it, with what affection should he not welcome you, who so strenuously support a Stagira⁴ that is now almost collapsing, extend its boundaries, and negotiate an honorable peace for it with enemies who are as hostile as can be? If Tolomei had seen and pondered your views on the active and passive principle before his book was published, he would not have spoken differently about substantial forms, nor would he have granted that they can be established by authority alone (which I should not want him to forget); in this, as with atoms and several other matters, it has always seemed to me that a good cause mounts a sham defense. I dare say that if Ermolao Barbaro had ever had the assistance of your insight concerning the notion of entelechy—a word without the understanding of which Aristotle's system appeared to him a mere enigma—he would never have had to consult a daemon.⁵ Your interpretation of this word promises to be more useful for the reconciliation of ancient and modern philosophy than any works writ-

quaecumque ab aliis hoc fine tituloque conscripta. Hoc habent nempe Cartesiani, qui formarum ideam quotidiano, eoque permolesto convitio flagitabant a nobis, hanc demum ipsam, eamque quam vellent, clariorem aggeri sibi vicissim sentient. Ut plane in eos quadrare videatur illud Aristotelis de quibusdam sui temporis philosophis an sophistis effatum lib. 4 Metaphysicorum textu 9, quod Fonseca noster his verbis latine reddidit. *Non ex ea parte peccant ii (Cartesiani) qui ea (principia Geometrica) tractant, quasi non philosophentur, sed quia prius quoddam est substantia, de qua nihil sciunt.*

Atque fuit hoc olim iudicium meum, cum ex Diario solum Parisiensi mihi notus eras, in quo ubi philosophiam tuam semel degustavi quidquid erat a te profectum et characterem tuo insignitum, avide semper pro modulo meo sum venatus, quod quidem ad philosophiam faceret: nam (quod dolens commemoro) mathematica tua in quibus regnare te fatentur ipsi Cartesiani, quod egregiam hanc disciplinam vix a limine salutarim, tacito pede praeterire quam illoto attingere satius duxi. Nunc vero tantum abest ut mentem mutaverim, ut potius quo plura tua videre contingit (vidi autem hic acta Lipsiensia quae alibi non videram) eo magis in mea sententia confirmar, magisque incredibilem in rebus philosophicis perspicaciam tuam (quod pace Cartesianorum dictum sit) admirer. Videram olim obiter ea quae in novissima dictionarii sui editione ad articulos de Pereira et Rorario addiderat Cl. Bailius e fonte tuo hausta, quae mihi magnopere placuerant, multasque dubitationes exemerant sed nunc ad manum est sola prior illius dictionarii editio in qua pleraque ista desiderari comperio. Si qua praeterea edidisti ad hoc forum spectantia ea nec vidi, et videre magnopere cupio. Atque imprimis (si fas sit) illud datae ad Ptolemaeum Epistolae fragmentum, in quo, ut ejus epistola innuit, mentem tuam accuratius declarabas, quae si nactus essem sine dubio plerique scrupuli mei dudum evanissent. Nec enim diffiteor aliquos esse qui negotium mihi facessant quibus proponendis, ne epistolae modum excedam, hac vice supersedebo unum duntaxat adduxisse contentus circa virtutem, quam ponis, activam.

Si virtus illa sita sit in ipso conatu ad agendum semper in actum prorupturo si non aliarum virtutum conatus impedirent, quaero an et quomodo id

ten by others to this end or under this pretext. Certainly the Cartesians, who have demanded with constant and tiresome abuse that we give up the idea of forms, in the end retain the very same thing, and they feel in turn that what they have asserted is conveyed more clearly by them. That plainly seems to fit them which Aristotle said of certain philosophers, or rather sophists, of his time in *Metaphysics*, chapter 2, text 9, which our Fonseca rendered in Latin with these words: "Those [Cartesians] who treat these things [geometrical principles] as though they were not philosophizing do not err for that reason, but rather because there is some prior thing, substance, of which they know nothing."⁶

This was already my opinion when you were known to me only from the Paris journal,⁷ in which, after I first encountered your philosophy, I eagerly hunted down to the best of my ability whatever was advanced by you and distinguished by your character—at least whatever concerned philosophy. It saddens me to recall that as regards your mathematics, in which even the Cartesians acknowledge your authority, I considered it preferable, because I had barely visited the threshold of that preeminent discipline, to pass by it with silent feet than to trample it with dirty ones. Now, though, I have improved my mind to such an extent that, on the contrary, the more I happen to see of your work (and here I have now seen the *Leipzig Acta*,⁸ which I had not seen elsewhere), the more I am confirmed in my opinion and the more I admire your great and extraordinary perspicacity in philosophical matters (which is said with all due respect to the Cartesians). Some time ago I saw in passing those things, derived from your work, which the excellent Bayle added to the articles on Pereira and Rorarius in the newest edition of his dictionary.⁹ These pleased me very much and removed many doubts, but now I have at hand only the earlier edition of the dictionary, in which I find that most of these things are missing. If you have made known publicly any further speculations, I have not seen them, though I desire greatly to do so, especially (if possible) the fragment of a letter to Tolomei, in which, as his letter indicated, you expressed your view more exactly.¹⁰ If I had had these things, no doubt most of my worries would have vanished long ago, for I do not deny that there are some points that have caused me problems. Although these should be put before you, in order not to exceed the limits of a letter, I will refrain from doing so here and will content myself with bringing up just one point concerning the active power that you assume.

If that power is located in the very endeavor to act, which will always be breaking forth into act, provided that the endeavors of no other powers im-

conciliari possit cum necessitate divini concursus immediati ad quamlibet actionem creaturae? Si enim ad actionem creaturae concursus huiusmodi divinus requiritur, conatus ille nullatenus differet a potentia agendi quam Scholae hactenus recepere cum conatus ille sic modificatus ab aliis agentibus non trahat post se actionem nisi Deus pro libero suo arbitrio concurrerit. Sin vero concursus ille Dei nihil est aliud quam virtus agentis, vel conatus per aliorum agentium conatum modificatus, jam quoad rem ipsam recidimus in sententiam Durandi, negantis immediatum influxum Dei in actiones creaturarum, non enim negat Durandus concursum Dei ab ipsa virtute causae creatae utcumque modificata et temperata indistinctum. Hanc vero Durandi sententiam sequi nobis non est integrum sed et ex protestantium scholis exulat, uti insinuat Sturmius cujus tamen argumentum pro sententia sua hinc petitur, vim nullam habet patitur enim manifestam instantiam in animabus, in quibus vim activam agnoscit. Quod enim ipse dicet de animabus, hoc dicere potero de aliis formis, ut patet.

Atque ex hoc scrupulo meo consilium meum, quale sit, dispicis: nempe ut notiones tuas salva, quantum fieri potest, earum substantia phrasibus Aristotelicis, aut potius has illis, et utrasque dogmatibus Ecclesiasticis accommodem. Quod consilium ubi tibi probari intellexero, aggrediar magnis animis, auspice te, meditatam Philosophiae peripateticae ad principia ex Aristotelis metaphysicis petita reductionem, si modo imposita Theologiae lectio tantum otii mihi concedat. Tu vero, Illustrissime Domine, conatum patrone meritissime, conatus meos non despicias, et ignoscas longiusculae epistolae meae. Mittam alias specimen aliquod analyseos quam concepi. Interea sum eroque semper

Illustrissimae Dominationis tuae

Humillimus et obedientissimus in Christo servus

Bartholomaeus Des Bosses SJ

Hildesii 25 Januarii 1706.

Leibniz to Des Bosses

Plurimum Reverende Pater

Cum maximo in veritatem affectu ferar, valde omnes complector quibus illa curae est, eoque magis laetor TE vicinum et amicum, cui amica est

pede it, I ask whether and how this can be reconciled with the necessity of an immediate divine concurrence for any action of a created thing. For if divine concurrence of this sort is required for the action of a created thing, that endeavor will not differ at all from a potential for acting, which the schools accept to this day, since that endeavor, so modified by other acting things, does not elicit a subsequent action, unless God concurs through his free will. But if, in fact, God's concurrence is nothing more than a power of acting, or an endeavor modified by the endeavor of other acting things, then we have already fallen back on the opinion of Durandus, denying the immediate influence of God on the actions of created things; for Durandus does not deny a concurrence of God that is indistinguishable from the very power of a created cause, modified and regulated in whatever way.¹¹ It is not open to us to follow Durandus's view, but this is also excluded by the Protestant schools, as Sturm implies.¹² Nevertheless, the argument he draws from this on behalf of his own view has no merit, for it suffers an obvious counterexample in souls, in which he recognizes an active force. What he says of souls, I could say of other forms, as is obvious.

And so, from this difficulty, you will discern my plan, such as it is: namely, that with your notions preserved so far as possible, I may accommodate the substance of them with the doctrines of Aristotle, or rather, accommodate the former with the latter and both with the dogmas of the Church. As soon as I have seen this plan approved by you, I shall—assuming the theology lectures assigned to me allow me some leisure—begin with great resolve the intended reduction of the Peripatetic philosophy to principles drawn from Aristotle's metaphysics. I am certain that you, most distinguished Sir, most worthy patron of endeavors, will not look down on my efforts and will forgive the lengthiness of my letter. I shall send at another time a sample of the analysis I have conceived. In the meantime, I am and always will be

Your Excellency's most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.
Hildesheim, 25 January 1706

2. Leibniz to Des Bosses¹

[Hanover, 2 February 1706]

Most Reverend Father,

Because I am moved by a great passion for the truth, I warmly embrace all those for whom it is a concern. I rejoice all the more in you as a neigh-

veritas, et mea nonnullius ad eam constituendam usus videntur.

Nos quoque Roma intelleximus inter paucos qui comitia vestra in se vertunt, haberi et Ptolemaeum. Addebantur et Alemannus, et Tamburinus quem Thyrsus Gonsales vicarium interim designarat. Ego perspecta et coram et per literas virtute et doctrina Ptolemaei, laetus ac lubens gratulabor viro insigni vestrae societatis praefecturam. Neque enim dubito praeculara privati consilia in magistratu efficaciora fore.

Cum non pauci egregii viri ex vestro ordine aliisque laudabilem operam posuerint in concilianda vetere et nova philosophia; tecum tamen sentio, quaedam desiderari adhuc, aliqua non recte exponi. Nam Honoratus Fabricius (cum quo aliquod juveni mihi commercium fuit), vir utique in naturae quoque cognitione plurimum versatus (quod miratus sum) nimium et tamen non satis concessit recentioribus, aut asseruit Scholae. Nam arcem Peripati, quam debebat tueri maxime, nempe Animas Brutorum, analogasque illis Entelechias, una excepta humana prodidit adversariis, dum interea exteriora quaedam propugnacula longe semota, nec defensionis patientia, nempe quasdam qualitates ἀρρήτους, quas tanquam primitivas assumsit, velut gravitatem et tensionem, magna cura servavit. Cum tamen in promptu sit, salva summa peripateticae doctrinae utramque petere a motu insensibilis materiae, corporumque raritatem et densitatem (unde vis tensorum, vulgo Elastica) ad instar spongiae concipere animo cujus spatia fluidum pervadit, quod aegre patitur consuetos sibi terminos mutatos mutari.

TE vero, Vir Eximie, cum rectum iter ingredi videam emendandae atque exornandae philosophiae ad usum Scholae, ut juvenus non poenitendis principiis imbuatur, etiam atque etiam (pro ea quam mihi indulges libertate) hortari audeo, ne in re tanta Reipublicae, imo Ecclesiae desis. Et Theologiam docenti ubique sese offert Philosophia.

Pro cursu philosophico ampliore, quem nunc non patitur tempus Tuum, Breviarium Philosophicum condi suaderem, quale olim Eustachius a S. Paulo confecit: id auditoribus Theologiae Tuis προχείρου loco foret, aliquando per Typos et in caeteros iturum.

bor and a friend, to whom truth is a friend and for whom my writings seem to have been of some help in establishing it.

We, too, have gathered that in Rome Tolomei is among the few who are thought to be attractive to your congregation. Also included here are Alamanni and Tamburini, whom Tirso González designated vicar general in the interim.² Having observed in person and through letters the virtue and learning of Tolomei, I shall congratulate with joy and pleasure this eminent man as head of your society. For I do not doubt that the enlightened views of an independent voice will be more effective in the position.

Although a number of distinguished men from your order and others have undertaken the laudable work of reconciling ancient and modern philosophy, I nonetheless agree with you that certain things are still lacking and that others have not been explained correctly. Certainly Honoré Fabri (with whom I had some correspondence in my youth),³ a man who also was very much involved in the investigation of nature (which I admired), conceded too much and yet not enough to the moderns, or rather attributed too much and yet not enough to the schools. For he surrendered to the enemies the stronghold of the Peripatetic philosophy that he ought to have guarded most vigorously—namely, the souls of beasts and entelechies analogous to them, with the sole exception of the human soul—while meanwhile preserving with great care certain external fortifications far removed and not capable of being defended, especially certain occult qualities, such as heaviness and tension, which he accepted as primitive, when in fact it is easy to derive both, without violating the spirit of the Peripatetic doctrine, from the motion of insensible matter and to conceive the rarity and density of bodies (from which arises the force of tension, commonly called elastic force) on analogy with a sponge, through whose spaces flows a fluid that resists changes to its accustomed boundaries.

As for you, worthy Sir, since I see you embarking on the correct path of reforming and improving philosophy for use in the schools, so that the youth are not infected with objectionable principles, I take the liberty (which you have granted me) of encouraging you again and again not to falter in an undertaking of such great importance for the republic of letters, as well as for the Church. A teacher of theology encounters philosophy everywhere.

Rather than a comprehensive philosophy course, which your time now does not allow, I would suggest that you compose a philosophical summary, such as Eustache de Saint-Paul once prepared.⁴ It will serve as an aid for those attending your theology lectures, and when published will someday reach the rest of the world.

Fateor me adolescentem etiam Scholae spinas attigisse nonnihil, praeter morem nostrorum, neque id fecisse unquam poenituit et alioqui eo semper animo fui ut mallet recepta emendari quam everti. Inde natae sunt mihi conciliatoriae Meditationes, quibus pro humanitate Tua tantopere faves. In quibus ad usum transferendis, si quae TIBI occurrunt dubitationes, conabor satisfacere aut certe ita exponere mentem meam ut pro acerrimo iudicio TUO ipse commodius de iis constituere possis.

Et jam nunc accedo ad quaestionem quam proponis, an et quomodo conciliari possit virtus activa Creaturarum cum concursu DEI immediato ad quamvis Actionem Creaturae. Nam hoc concursu admissio vereris, ne virtus activa creaturae redigatur ad meros terminos facultatis. Ego agnosco concursum DEI ita necessarium esse, ut posita quacunque virtute Creaturae non esset secutura Actio, si DEUS subtraheret concursum: sentio etiam nec ipsam vim activam, imo nec facultatem nudam extitutam in rebus sine concursu divino; quoniam in genere statuo, quantum in rebus est perfectionis, tantum a DEO perpetua operatione profluere. Non tamen video quomodo hinc virtus ad facultatem redigatur. Nam in virtute activa arbitror esse quandam actionis atque adeo concursus ad actionem divini exigentiam (ut vestri loquuntur), quamvis resistibilem, fundatam in Legibus naturae per sapientiam divinam constitutis, quae Exigentia in nuda facultate non inest. Ex vi activa (quae scilicet conatum involvit) sive ex Entelechia sequitur Actio si modo accedat concursus DEI ordinarius. Ex facultate vero, accedente licet eo concursu qui requiritur ad virtutem, Actio non sequetur. Itaque concursus DEI, actioni creaturae necessarius, qui sufficit ad virtutem, non sufficit ad facultatem: quia scilicet virtus ipsa jam constituta fuit per anteriorem quandam DEI concursum, qualem non habuit nuda facultas.

In mea responsione aliqua Cl. Sturmio data Actisque Lipsiensibus inserta reperies demonstrationem (ut mihi videtur) Geometricis parem, quae ostendit posita quam Cartesiani statuunt, plenitudine rerum, et uniformitate materiae, motuque solo accedente, semper aequivalentia sibi substitui perinde ac si tantum rota perfecte uniformis circa suum axem ageretur, aut orbes concentrici ex materia perfecte similari volverentur: Atque ita statum unius momenti a statu alterius momenti distingui non posse, ne ab Angelo quidem. Ergo nec in phaenomenis varietas existere posset: adeoque

I admit that as a youth I occupied myself quite a bit with the subtleties of the schools (more than is usual for us), and I never regret having done so; in general, I have always felt it preferable to reform received opinions than to overthrow them. For this reason, I have produced the conciliatory meditations that you in your kindness praise so highly. If in making use of them doubts occur to you, I shall try to assuage them, or at least explain my mind in such a way that, employing your keen intelligence, you yourself can resolve them more easily.

I come now to the question you raise, namely, whether and how the active power of creatures can be reconciled with the immediate concurrence of God in any action of a creature. For you fear that, if this concurrence is admitted, the active power of a creature will be reduced to the mere terms of a faculty. I myself recognize God's concurrence to be so necessary that, whatever creaturely power is assumed, no action would follow if God were to withdraw his concurrence. I also believe that neither active force itself nor even a bare faculty would exist in things without divine concurrence, since I hold, in general, that however much perfection there is in things, it flows forth from God by a continual operation. Nevertheless, I do not see how it follows from this that power is reduced to a faculty, for I maintain that in an active power there is a certain exigency⁵ (as your schools say) for action and hence for divine concurrence for action, albeit an exigency that can be resisted, which is grounded in the laws of nature established through divine wisdom, and this exigency is not present in a bare faculty. From active force (which obviously involves endeavor), or entelechy, there follows action, provided only that the ordinary concurrence of God is added; but from a faculty, even assuming the concurrence that is required for a power, action will not follow. And so, God's concurrence, which is necessary for the action of a creature and sufficient for a power, is not sufficient for a faculty, since the power itself was already established through some prior concurrence of God, which is not the case with a bare faculty.

In my response to the celebrated Sturm, published somewhere in the *Leipzig Acta*,⁶ you will find a demonstration equal (so it seems to me) to those of the geometers, which shows that if (as the Cartesians hold) a plenitude of things and the uniformity of matter are assumed, and motion alone is added, equivalent things always take each other's place, just as if a perfectly uniform wheel were moved about its axis, or concentric circles of perfectly similar matter were rotated, with the result that the state at one moment could not be distinguished from the state at another, not even by an angel. Therefore, variety could not exist in the phenomena, and so, be-

praeter figuram magnitudinem et motum admittendas esse formas, per quas distinctio apparentiarum in materia oriatur quae non video unde intelligibiliter peti queant, nisi ab Entelechiis.

Quae olim ad Ptolemaeum misi per Canonicum Cathedralem Hildesiensem Baronem de Reuschemberg, magna jactura boni publici immatura morte extinctum; ea nunc immersa acervo schedarum aegre reperirem. Venient tamen in manus digesturo hanc molem, ut subinde facere soleo, faxoque ut videas, quanquam aliquid novi TIBI vix dabunt.

Cum Gallus vestrae societatis vir doctus et ingeniosus quaedam contra meam explicationem consensus inter animam et corpus objecerit, quod scilicet proprie non explicet ipsam Unionem: respondi consilium mihi fuisse tantum phaenomena explicare: Unionem autem neque ex numero esse phaenomenorum, nec satis haberi descriptam, ut ejus interpretationem aggredi audeam. Hujus responsionis in Galliam missae apographum Tibi mitto, rogoque ut aliquando remittas, quia aliud non habeo. Quod superest vale et fave. Dabam Hanoverae 2 Febr. 1706.

Deditissimus

Godefridus Guilielmus Leibnitius

Des Bosses to Leibniz

Illustrissime Domine

P[ax] C[hristi]

Dum Hildesium mittebar a majoribus, haec me cogitatio recreabat imprimis: hanc urbem esse vicinam Hannoverae, et fore fortassis ut tui, quem tantopere suspiciebam, coram intuendi copiam aliquando nanciscerer. Supra spem accidit quod et praesentem alloquio, et nunc absentem litterario commercio sis dignatus. Quid dicam? Beasti me humanissima epistola tua, stimulumque ingentem addidisti ad meditatum mihi curriculum iis fere quos praescribis et ego ante informaram animo, limitibus auspicandum. Sed ne a principio ipso aberrem, patere, vir illustrissime ut tibi pauca quaedam axiomata proponam quibus Aristotelicam niti philosophiam arbitror, ne si forte infirma sint fundamenta, ego turpiter me dem molem eis caeteram superstruendo.

1. Ens et unum convertuntur. 2. Continuum est indivisibile in infinitum. 3. Infinitum actu non datur in natura. 4. Unitas est principium numeri. 5. In

sides figure, magnitude, and motion, forms must be admitted, through which the difference in the appearances may arise in matter; and I do not see where these forms could intelligibly be sought except in entelechies.

Buried as they are now in a pile of papers, I would have a hard time finding those things I once sent to Tolomei by way of Baron von Reuschenberg, canon of the Hildesheim cathedral, whose premature death was a great loss to the common good. However, they may turn up when I sort through this mass (as I usually do from time to time), and I shall arrange for you to see them, although they are unlikely to offer you anything new.

As a Frenchman from your society, a learned and intelligent man, has raised certain objections against my explanation of the agreement of the soul and the body, namely, that it does not properly explain the union itself, I have responded that it was my intention only to explain the phenomena, and that the union is not among the phenomena and is not sufficiently well represented that I may dare to undertake its interpretation. I am sending you the autograph of the response I sent to France, and I ask that you send it back sometime, for I have no other copy.⁷ For the rest, farewell and think kindly of me. From Hanover, 2 February 1706.

Most faithfully,

Gottfried Wilhelm Leibniz

3. Des Bosses to Leibniz¹

[Hildesheim, 12 February 1706]

Most Distinguished Sir,

The Peace of Christ,

When I was sent to Hildesheim by my superiors, one thought in particular cheered me: that this town is in the vicinity of Hanover and that I might at last have a chance of meeting you, whom I so admired, face to face. Beyond all hope, it has happened that you have judged me worthy of conversation in person and now, when absent, of an exchange of letters. What shall I say? You have blessed me with your most indulgent letter and added a powerful incentive for making a start on the curriculum I have devised, respecting fully the limits you recommend and I earlier conceived. But let me not stray from the main point, most distinguished Sir, which is to set out for you the few axioms on which I believe the Aristotelian philosophy depends, so that, if the foundations turn out to be rotten, I do not disgrace myself by building everything else on top of them.

1. Being and one are convertible. 2. The continuum is infinitely divisible.² 3. There is no actual infinity in nature. 4. Unity is the principle of

causis et principiis non progrediendum in infinitum sed standum alicubi. Quae axiomata ex Aristotelis Metaphysica deprompta satis consona systemati tuo existimo, tertium si demas, de quo dubito, nam visus es alicubi mihi infinitum actu asserere. Puto tamen mentem tuam per infinitum in potentia satis explicari posse, qua de re iudicium tuum expectabo.

De Honorato Fabio tibi prorsus assentior, nimium concessisse illum recentioribus. Qui licet satis peripatetice de substantia disserere incepisset, ubi tamen denique formam substantialem ad instar modorum resultantem asseruit, omnia pessundedit. Nam modos activos esse posse negat ipse passim. Unde fit ut ejus sententia vel solis accidentibus, vel ipsi etiam materiae tribuenda sit activitas. Quorum utrumque absurdum est, postremum ex atomis consequitur in quibus ipse materiae collocat essentiam.

Dubitationem, quam nuper attuleram, penitus exemisti mihi. Tenere mihi nunc videor quid conatum inter et potentiam nudam intersit. Interim Scholasticos sub nomine potentiae (licet virtus et conatus magis proprie dicatur) rem ipsam admisisse reor dum potentiam necessariam defini-verunt: *quae positis omnibus ad agendum praerequisitis agit necessario*. Quod cum in natura fiat semper (de rationali non loquor) locum in ea non habebunt potentiae nudaе quoad actiones naturales, sed solum quoad actiones, quas vocamus, supernaturales ad quas utique substantiae illa, quam dicis, excitatione indigent. Quod cum Theologia nostra apprime consonat. Progredior nunc ad alias dubitationes.

Et imprimis aveo scire an et quid juxta systema tuum dici proprie violentum possit in natura, nam vulgatam violenti definitionem: *quod fit a principio extrinseco, passo non conferente vim*, non admittes, cum omnis actio juxta te sit proprie a principio intrinseco.

2° Si motus, ut dicis, consistat in vi ipsa ad mutationem nitente ergo forma sive virtus nihil efficiet cum ipsa sit vis ad mutationem nitens.

3° Estne vera substantialis unitas in aqua tota quae E.G. continetur in urna?

4° Vel formae inanimae proprie producant aliquid in materia vel non: Si producant; quid vetat quominus etiam anima rationalis aliquid proprie producat in corpore, cum aliis formis conveniat activitas propria in mate-

number. 5. In causes and principles there is no progression to infinity but always some stopping point. I believe these axioms taken from Aristotle's metaphysics agree well enough with your system, if you omit the third, which I have doubts about, for you seemed to me to defend an actual infinity somewhere. I suspect, though, that your view can be adequately explained in terms of a potential infinity, a matter on which I await your opinion.

I certainly agree with you that Honoré Fabri conceded too much to the moderns. Although he may have begun by discussing substance in a sufficiently Peripatetic way, nevertheless when he eventually claimed that a substantial form is the equivalent of something resulting from modes, he gave up everything. For at times he himself denies that modes can be active. According to him, it follows from this that activity should be attributed to accidents alone or to matter itself as well. Both of these are absurd, the latter as a consequence of the atoms in which he locates the essence of matter.

You relieve me completely of the doubt I recently raised. I see now that I was defending something between an endeavor and a bare power. However, I think the Scholastics may have admitted this very thing under the name "power" (though "virtue" and "endeavor" are more appropriate terms), when they defined a necessary power as "that which necessarily acts when all the prerequisites for acting are given." Because this always happens in nature (I do not speak of the rational), bare powers will play no role in natural actions but only in the actions we call "supernatural," for which substances certainly require what you call "excitation." This agrees completely with our theology. I proceed now to other difficulties.

First, I am eager to know whether and how, according to your system, there can properly be said to be that which is forced in nature, for you will not accept the common definition of "forced" as "that which occurs as a result of an extrinsic principle, with the agent contributing nothing," since according to you, strictly speaking, every action is from an intrinsic principle.³

Second, if motion, as you say, consists in force itself striving toward change, then form or power will bring about nothing, since it itself is force striving toward change.

Third, is there a true substantial unity in all the water which is, for example, contained in an urn?

Fourth, either inanimate forms actually produce something in matter or they do not. If they do, what prevents even a rational soul from actually producing something in a body, since its own activity agrees with that of

riam, in quantum Entelechiaae sunt quod attributum anima quoque rationalis habet. Si non producunt, ergo materiae ipsi concedenda erit activitas quoad motum E.G. nam nemo dicet materiam non moveri per se, motu in materia ipsa recepto.

Aliis, quos habeo, scrupulis proponendis supersedebo usque ad Pascha, cum Hannoveram veniens eorum dissolutionem ex ore tuo excerpturum me spero. Quanquam metuo, ne domo rursus absis uti accidit in festis natalitiis.

Legeram ante cum attentione et voluptate, rursusque legi pulcherrimam tuam contra Cartesianos demonstrationem, quam inseruisti tuae contra Cl. Sturmium dissertationi. Quid quaeris? Me quidem certe penitus convicit. Nec miror intactam ab adversario respondente relictam esse: non habebat scilicet quod reponeret. Plane ostendis si praeter materiam uniformem, figuram, et motum nihil admittatur in natura, nullam quoque in rebus varietatem notatum iri. Imo nec figuram, opinor, aut motum localem esse posse. Nam et figura superficiem intrinsecam corporis figurati et motus localis superficiem extrinsecam corporis locantis postulant, quarum neutra saltem ante mentis divisionem intelligitur: ex quo pulchre colligis statuendum esse motum alterationis a locali diversum. Nil poterat verius et ad sensum peripateticum accommodatius.

Responsum ad objectionem P. Turnamini, quod cum gratiarum actione remitto, exscripsi, ut soleo omnia tua quae ad manus meas perveniunt. Et si plura communicaveris, restituam fideliter ubi exemplum descripsero. Multiplici ex capite gratum mihi fuit videre schedam illam. Primum hinc disco non interruptum esse Trivultiense Diarium uti minabatur qui illud recudere coeperat Amstelodamensis Typographus cujus editionis cum Triennium mihi compararim sex tomis comprehensum, caetera quoque quae porro edita sunt et edentur cum, ubi venalia prostent, intellexero, adjicere est animus.

Alterum est, quod ex hoc scripto tuo lux mihi quaedam affulsit ad introspecendam melius mentem tuam. Nam, ne quid dissimulem, haerebam perinde atque Gallus ille noster, ad scopulum istum, subveritus ut unione metaphysica carere possemus, non quod eam cum principiis tuis hucusque visis pugnare existimarem, sed quia timebam ne me principium aliquod tuum lateret quod unionis istius necessitatem tolleret.

the other forms in matter, inasmuch as they are entelechies, save that the soul also has the attribute of rationality? If they do not produce anything, then activity, in the form of motion, for example, will have to be conceded to matter itself, for no one will say that matter is not moved through itself, when motion is received in the matter itself.

I shall refrain from raising the other difficulties I have until Easter, when I come to Hanover and hope to hear the resolution of those omitted directly from you. However, I fear that you will be away from home again, as happened at Christmas.

I had earlier read carefully and with delight, and have now reread, your beautiful demonstration against the Cartesians, which you introduced in your essay against the famous Sturm.⁴ What did you hope to achieve? It certainly thoroughly convinced me. I am not surprised that it has been left untouched by the response of your adversary, for there was nothing he could say in response. You show plainly that if nothing is admitted in nature besides uniform matter, figure, and motion, then no variety either will be observed in things. Indeed, I believe there can be neither figure nor local motion. For figure presupposes the internal surface of a body with shape, and local motion presupposes the external surface of a stationary body, neither of which is understood prior to division by the mind at least: from which you beautifully infer that it should be concluded that motion of alteration is different from local motion. Nothing could be truer and more in keeping with Peripatetic views.

I have copied out your reply to the objection of Father Tournemine, as I am accustomed to do with everything of yours that reaches my hands, and I am sending it back with an expression of thanks. And if you communicate many things, I shall return them faithfully when I have drafted a copy.⁵ I was on a couple of counts pleased to see that essay. First, I learned from it that the *Mémoires de Trévoux* has not been interrupted, as the Amsterdam publisher who had begun reprinting it was threatening. Although I obtained for myself the three-year run of this edition, contained in six volumes, I understand that there is a plan to add others also that have been published previously or will be published, when they become available for sale.⁶

The other reason I was pleased is that some light is cast by your piece that allows me to penetrate your mind better. For, lest I hide the truth, I remained uneasy, just like the Frenchman from our order, apprehensive that we might lack a metaphysical union—not because I thought it conflicted with your principles and views on this subject, but because I was afraid some principle of yours that was concealed from me might have removed the necessity of this union.

Caeterum quantumlibet μυστηριώδης sit unio illa. Hoc mihi certum est: non posse eam in modo relativo constitui. Relationes enim, uti alia accidentia substantiam jam constitutam supponunt. Et hinc est quod Aristoteles partes substantiae ante mentis opus negat esse relatas, sive ad totum sive ad se invicem. Sane cum relatio sit quidam ordo unius ad alterum, ordo realis esse qui potest, ubi duntaxat est unum? Non igitur statuenda est relatio realis inter animam et corpus sed tantum relatio secundum dici, ut vocant, quae a mentali corporis et animae a se invicem praecisione primum exoritur. Quare dicendum mihi videtur, hoc quidquid est quod praeter animam et corpus substantiam individuum constituit ipsam esse existentiam absolutam totius substantiae concretae quam Aristoteles et S. Thomas a materia et forma (quae scilicet substantiae essentia sunt) distinctam, unamque utrique communem statuunt. Atque hinc sententia Alberti, quem laudas, formas, imo totum animal, secundum essentiam in materia semper fuisse ponens non modicam lucem accipere posse videtur, idque prorsus ad mentem tuam, ni fallor, accommodate. Qua de re videri potest S. Thomas liber de natura materiae qui extat Tomo 2 editionis Parisensis anni 1660, in quo, capite 8 et 9 pagina 367 examinat *quomodo in homine sint plures formae secundum essentiam sed una tantum secundum esse*. Et: *quomodo impossibile est duo esse substantialia simpliciter esse in eodem composito materiali*. Quae omnia satis ad gustum tuum fore confido. Haec si vera essent (Aristotelem quidem sic sensisse mihi persuasum est) non esset quod ultra unionis explicationem quaereremus cum existentia cuique sua prima sit notio.

Expectamus avide quis tandem fuerit nostrorum comitiorum exitus. Quod propediem rescimus de Ptolomaeo multus adhuc sermo est; de Alemano et Tamburino nonnullus, quibus novissime adduntur Imperialis, et Daubantonius Gallus, is ipse qui Philippo 5^{to} a confessionibus fuit. Ego, si quid de Ptolomaeo nuncietur, certiore te faciam illud, tibi gratulabor.

Vale, illustrissime Domine. Deus ad Germaniae decus et scientarium incrementum incolumen diu te servet ita precatur.

Illustrissimae Dominationis tuae

Humillimus et obedientissimus in Christo servus

Bartholomaeus Des Bosses SJ

Hildesii 12 Februarii 1706

In any case, however obscure that union is, I am certain of this: it cannot consist in a relational mode; for relations, like other accidents, presuppose an already constituted substance. And it is for this reason that Aristotle denies that the parts of a substance are related, either to the whole or to each other, prior to the work of the mind. Indeed, since a relation is some order of one thing to another, how can there be a real order when strictly speaking the thing is one? It should not be concluded, therefore, that there is a real relation between the soul and the body, but that there is only a relation in a manner of speaking, as they say, which arises in the first place through a mental abstraction of the body and the soul from each other.⁷ Thus, it seems to me it should be said that whatever constitutes the individual substance besides the soul and the body is the absolute existence itself of the whole concrete substance, which Aristotle and St. Thomas hold is distinct from matter and form (which, in fact, are the essence of substance) and one thing common to both.⁸ And from this it seems that the opinion of Albert, whom you praise, that forms, and indeed the whole animal, have always been in matter according to essence, receives no small support, and, unless I am mistaken, this is entirely in accord with your view.⁹ On this issue, it is worth looking at St. Thomas's book on the nature of matter, which is found in the second volume of the Paris edition of 1660. There, in chapters 8 and 9, page 367, he considers "how in man there may be many forms according to essence but only one according to existence" and "how it is impossible for two things that are without qualification substantial to exist in the same material composite." I trust that everything he says will be sufficiently to your taste. If these things are true (and I am persuaded that even Aristotle thought so), it would not be because we had sought something beyond an explanation of the union, since one's own existence is a primary notion for anyone.

We eagerly await the final outcome of our congregation. There is still much talk that we will soon hear something about Tolomei; there is some talk of Alamanni and Tamburini, to whom were added very recently Imperiale and the Frenchman Daubenton, who was confessor to Philip V.¹⁰ If anything is announced about Tolomei, I shall let you know and offer my congratulations.

Farewell, most distinguished Sir. I pray God may long preserve you for the glory of Germany and the continued growth of knowledge.

Your Excellency's most humble and obedient servant in Christ,

Bartholomew Des Bosses, S.J.

Hildesheim, 12 February 1706

Leibniz to Des Bosses

Plurimum Reverende Pater

Vereor, ut quem mihi defers honorem, dum de abstrusioribus quaeris, mereri satis possim. Dico tamen sententiam, quia jubes et boni consulis.

Ens et Unum converti Tecum sentio; Unitatemque esse principium numeri, si rationes spectes, seu prioritatem naturae, non si magnitudinem: nam habemus fractiones, unitate utique minores in infinitum.

Continuum in infinitum divisible est. Idque in Linea Recta vel ex eo constat, quod pars ejus est similis toti. Itaque cum totum dividi possit, poterit et pars, et similiter quaevis pars partis. Puncta non sunt partes continui sed extremitates, nec magis minima datur pars lineae, quam minima fractio Unitatis.

Infinitum actu in natura dari non dubito, positaque plenitudine mundi, et aequabili divisibilitate materiae, sequitur ex legibus motus varii, quodvis punctum moveri motu diverso a quovis alio assignabili puncto. Sed nec aliter sibi pulchritudo rerum ordoque constaret.^{L1} Neque video, cur hoc refugere debeamus. Quae contra objiciuntur, responsionem, ni fallor, patiuntur, et falsis hypothesis niti solent.

Non datur progressus in infinitum in rationibus universalium seu aeternarum veritatum, datur tamen in rationibus singularium. Ideo singularia a mente creata perfecte explicari aut capi non possunt, quia infinitum involvunt. Majora pendent a minoribus, et haec ab aliis adhuc minoribus.

Scholastici aliquando fortasse potentiam intellexere, quae esset cum conatu; communiter tamen rem aliter accepisse putem. Sic Risivitas in homine (vulgo Risibilitas) non significat risurum hominem, si nemo impediat, sed risurum, si occasio ridendi offeratur. Itaque cum potentiam requisitis omnibus positis necessario agere dixere, inter requisita credo posuere occasionem sollicitantem.

Violentum admitto utique, neque a communi sermone recedendum^{L2}

L1. DELETED IN DRAFT: | Mea certe philosophia sine infinita actu multitudine stare non potest. |

L2. DELETED IN DRAFT: recedendum | censeo, dummodo verba sano sensu intelligentur. Violentus mihi dolor est quia principium ejus in iis non invenio, quae in mea mente distincte percipio. Quae ex confusis perceptionibus in nobis oriuntur

4. Leibniz to Des Bosses¹

[Hanover, 14 February 1706]

Most Reverend Father,

I fear that I do not fully deserve the honor you pay me when you inquire about more abstruse matters. Still, I will give you my opinion, since you ask for it and regard it favorably.

With you, I hold that being and one are convertible, and that unity is the principle of number, if you consider reasons, or priority of nature, but not if you consider magnitude, for we have fractions, which are certainly less than unity, into infinity.

A continuum is infinitely divisible. And this holds for a straight line or what is formed from it, since a part of a line is similar to the whole. And so, since the whole can be divided, the part can be also, and similarly any part of the part. Points are not parts of a continuum but extremities, and there is no more a least part of a line than a least fraction of unity.

I do not doubt that there is an actual infinity in nature, and with the plenitude of the world assumed, as well as the uniform divisibility of matter, it follows from the laws of varying motion that any point is moved by a motion different from that of any other specifiable point. But the beauty and order of the universe would not agree with anything other than this.^{L1} Nor do I see why we should avoid this conclusion. Unless I am mistaken there is a response to the objections that are brought against it, and they usually rest on false hypotheses.

The reasons for universal or eternal truths do not proceed to infinity, yet they do in the case of singular truths. Thus, singular truths cannot be perfectly explained or grasped by a created mind, for they involve infinity. Greater things depend on lesser things, and these on lesser things still.

The Scholastics may sometimes have conceived of a power that had an endeavor; however, I believe that generally the matter has been understood differently. Thus, risibility in a man does not signify a man who will laugh if no one prevents him, but one who will laugh if an occasion for laughing presents itself. And so, when it is said that with all the requisites assumed a power necessarily acts, I believe it is also assumed that the instigating occasion is among the requisites.

I certainly acknowledge that which is forced, and I do not think we should depart from customary ways of speaking,^{L2} which are related to

L1. DELETED IN DRAFT: I My philosophy certainly cannot stand without an actual infinite multitude. I

L2. DELETED IN DRAFT: I provided that words are taken in the correct sense. That which is forced is painful to me, since I do not find its origin in the things I perceive distinctly in my mind. And those things that arise in us from confused perceptions

puto, qui ad apparentia refertur; eo fere modo, quo Copernicani de motu Solis loquuntur cum vulgo. Simili modo loquimur de casu et fortuna.

In motu concedo utique esse aliquid ultra vim ad mutationem nitentem, nempe ipsam Mutationem.

In aqua non magis substantialem Unitatem esse puto, quam in grege piscium eidem piscinae innatantium.^{L3}

Cum animam nihil in materia producere ajo, tantum intelligo per animam non mutari leges motuum materiales. Alioqui anima est Entelechia seu potentia activa primitiva in substantia corporea, per quam Materia seu ejusdem substantiae potentia passiva primitiva perficitur, et horum primitivorum modificatione in ipsa substantia corporea actiones passionisque nascuntur.^{L4}

Sturmium puto fuisse amantem veritatis, sed praejudiciis occupatum mea non satis attente considerasse.^{L5}

Responsionem ad Turnamini objectionem (sic satis jam veterem, sed mihi serius observatam) misi in Galliam nuper, sed nondum accepi redditam. Ita nescio, quis sit nunc status diarii Trivultiani. Spero tamen verum non fore, quod de cessatione ejus dictum est. Interim metuo, ne forte au-

corpori seu externis transcribimus, neque id male explicationem enim capiunt ab externis. |

L3. DELETED IN DRAFT: | Cum animam nihil in materia producere ajo, hoc ita intelligo ut leges materiales motuum per animam non mutantur. Alioqui anima est entelechia seu potentia activa materiam perficiens pro potentia passiva sumtam. Hoc sensu ut incompletum est alterutrum.

Unio in qua difficultatem explicandi reperio ea est quae diversas substantias simplices seu Monades in corpore nostro existentes nobiscum ita jungit, ut unum inde fiat; nec satis apparet quomodo praeter singularum Monadum existentiam novum existens oriatur, nisi quod vinculo continui conjunguntur quod phaenomena nobis exhibent. |

L4. DELETED IN DRAFT: nascuntur | quanquam ista (fateor) satis distincte explicare difficile sit, ut nulla obscuritas restet. |

L5. DELETED IN DRAFT: | Supposito motu supponentur et figurae, sed nihil inde oriatur, per quod dignosci unus status ab alio possit. Verbo sunt notiones incomplete philosophorum substantiae naturam non intelligentium. |

appearances in much the same way as Copernicans speak with the vulgar about the motion of the sun. We speak in a similar way about chance and destiny.

I concede that in motion there is indeed something beyond a force striving toward change, namely, change itself.

I believe that there is no more a substantial unity in water than in a school of fish swimming in the same fishpond.^{L3}

When I say that the soul makes nothing happen in matter, I mean only that the material laws of motion are not changed by the soul. In general, the soul is an entelechy or primitive active power in a corporeal substance, through which the matter or primitive passive power of the same substance is completed; and by means of the modification of these primitive powers, actions and passions are produced in the corporeal substance itself.^{L4}

I believe that Sturm was once a lover of the truth, but that, preoccupied with prejudices, he did not consider my views with sufficient care.^{L5}

I recently sent to France a response to Tournemine's objection (though it was already quite old, I came across it rather late), but I have not yet received a reply.² Thus, I do not know what the state of the *Mémoires de Trévoux* may be now. I hope, though, that what has been said about its cessation does not prove to be true. Nevertheless, I fear that it perhaps will have been harmful for the authors, since they sometimes treat theological

we ascribe to the body or external things; and we do not do so wrongly, for they receive an explanation in terms of external things. |

L3. DELETED IN DRAFT: | When I say that the soul makes nothing happen in matter, I mean to say that the material laws of motion are not changed by the soul. For the rest, the soul is an entelechy or primitive active power completing matter, taken as a passive power. In this sense, each is as incomplete as the other.

The union I find some difficulty explaining is that which joins the different simple substances or monads existing in our body with us, such that it makes one thing from them; nor is it sufficiently clear how, in addition to the existence of individual monads, there may arise a new existing thing, unless they are joined by the bond of a continuous [thing] that the phenomena display to us. |

L4. DELETED IN DRAFT: | although (I admit) it is difficult to explain this in a sufficiently distinct way, such that no obscurity remains. |

L5. DELETED IN DRAFT: | With motion assumed, figures would also be assumed, but nothing would arise from this by which one state could be distinguished from another. In a word, these are the incomplete notions of philosophers who do not understand the nature of substance. |

toribus nocuerit, quod interdum res Theologicas liberius nec sine affectu tractant, et aliquando in alios paulo aculeatius dicunt.^{L6}

Gaudeo, consilium de condendo Breviario philosophico Tuis destinatis consentire. Et omnino sentio, de multis non bene decerni, nisi omnia sint in conspectu.

Vereor, ut frui colloquio Tuo possim proximo Paschali festo. Nam non Brunsvigam tantum, sed et Berolinum excurrendum est mihi. Spero tamen alias affuturam fortunam voto meo. Interea vale et omnia ex sententia gere, ut respublica literaria Tuis praeclaris lucubrationibus mature fruatur, et mihi favere perge. Dabam Hanoverae 14 Febr. 1706.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Cum ubique Monades seu principia unitatis substantialis sint in materia, consequitur hinc quoque infinitum actu dari, nam nulla pars est aut pars partis quae non monades contineat.

Des Bosses to Leibniz

Illustrissime Domine

P[ax] C[hristi]

Posterioribus litteris tuis mihi longe gratissimis distuli respondere, quod te brevi profecturum putarem; nunc cum ex Cl. Behrens intelligam iter tuum non tam cito processurum, audeo novas circa responsum tuum dubitationes proponere, quibus, si ejusmodi videbuntur quae alios quoque remorari queant, tu, cum erit commodum tuum, respondebis. Nolo enim abuti humanitate tua, aut pretiosissimum tempus tuum mea causa inutilibus officiis impendi. Interim dubiis hisce meis, sive ex praejudiciis nascentur, sive ex non satis percepta mente tua, eluctari non possum, cum tamen, ut sapienter mones, de multis non bene decernatur nisi omnia sint in conspectu.

Ac imprimis, si ens et unum convertuntur, nihil igitur simpliciter et actu

L6. DELETED IN DRAFT: | Quae de Unione sumta ab existentia compositi addis, altioris fortasse sunt indaginis, nam erit qui dicet unionem de compositi essentia esse. Sed in haec spinosiora immergi fortasse nunc necesse non est. |

matters more freely and not without emotion, and occasionally they speak a little too harshly against others.^{L6}

I am pleased to support the plan of producing a philosophical summary according to your design. And, in general, I believe that many matters are not judged properly unless everything is before the eyes.

I fear that I may not be able to enjoy your conversation during the coming Easter holiday, for I must travel not only to Brunswick but also to Berlin. I hope, however, that at another time, God willing, an opportunity will present itself. In the meantime, be well, do everything with the thought that the republic of letters may in good time enjoy your excellent ruminations, and continue to think kindly of me. From Hanover, 14 February 1706.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. Since monads or principles of substantial unity are everywhere in matter, it follows from this that there is also an actual infinity, for there is no part, or part of a part, that does not contain monads.³

5. Des Bosses to Leibniz¹

[Hildesheim, 2 March 1706]

Most Distinguished Sir,

The Peace of Christ,

I have long put off replying to your last, most welcome letter, for I thought that you would be departing shortly. Now, since I understand from the excellent Behrens² that your journey will not begin very soon, I venture to raise some new questions about your response. If they seem to be of the sort that might also delay others, you will reply to them at your convenience, for I do not want to abuse your kindness or have your most precious time expended on my account with useless obligations. In any case, here are my doubts; whether they arise from prejudices or from not having fully grasped your views, I cannot determine, since in any case, as you wisely point out, many matters are not properly decided unless everything is before the eyes.

To begin, if being and one are convertible, then nothing will exist in re-

L6. DELETED IN DRAFT: | Those things you add about a union inferred from the existence of a composite perhaps belong to a deeper inquiry, for it will be one which will state that union is of the essence of a composite. But perhaps it is not necessary now to plunge into these thornier matters. |

extat a parte rei nisi quod est unum actu simpliciter; sed fractio unitatis sive unius actu simpliciter, non est unum actu simpliciter, alioqui unum ex Materia et Entelechia constans, cujus fractionem accipimus, esset aggregatum unitatum, adeoque non unum. Erunt igitur fractiones unitatis cujusque simplicis entia tantum mathematica quae abstractionem mentis consequuntur.

Rursus: quaelibet pars materiae existit, ergo quaelibet pars materiae est una vel multae; si multae, pars partis est una, nam ubi non est unum, neque sunt multa. Porro hoc quod unum est, non est multa. Ergo materia quatenus substat uni entelechiai, non est multa actu.

2° Aveo scire an infinitum actu in magnitudine perinde atque in multitudine admittere necesse sit in natura? Ptolemaeus quidem primum respuit, asserto secundo: sed an ejus sententiam ac solutiones probas? Si non; suggerere mihi, obsecro, autorem quempiam, quem in propugnando infinito ducem sequi tuto possim, aut saltem clavem difficultatis verbo indica, nam falsas hypotheses, quibus infiniti adversarios niti ais, non deprehendo, nec quenquam vidi qui mihi satisfaciat.

Monebas alias in Trivultiano Diario, ubi de calculo differentiali sermo erat, necesse non esse ut rigide sumatur infinitum, et in Specimine tuo Dynamico postquam de infinitis impetus gradibus locutus es, subdis: *quantum non ideo velim haec entia mathematica reapse sic reperiri in natura, sed tantum ad accuratas aestimationes abstractione animi faciendas prodesse*. Ex quo duplici loco ansam ceperam opinandi infinitum quod adstruis intra syncategorematici fines contineri posse, quid enim vetat, quominus id quod de impetus gradibus dicitur, ad substantiarum multitudinem transferamus? An plenitudinem mundi et aequabilem materiae divisibilitatem legesque motus varii explicari pariter non posse censes citra infinitum, actu stricte sumptum?

3° Cum ais nullam partem substantiae corporeae, imo nec partem partis esse quae monadas non contineat, vel vis eandem praecise materiam pluribus simul Entelechiis informari, vel aliam materiae partem alii Entelechiai; singulas singulis, nullamque pluribus subesse? Non primum opinor, alioquin dici posset quamlibet materiae partem omnes formarum saltem inanimatarum species continere, sicque materiae homogeneitas statueretur, et varietas tolleretur, ergo secundum asserendum. At Entelechiai (utpote infinitae), cum in materia sint, singulae singulas materiae

ality simply and actually except what is actually and simply one. But a fraction of unity, or of what is actually and simply one, is not actually and simply one, for otherwise one thing composed of matter and entelechy, whose fraction we are supposing, would be an aggregate of unities, and so not one. Therefore, fractions of unity and of any simple thing will be only mathematical beings that result from a mental abstraction.

Again: any part of matter exists, therefore any part of matter is one or many; if many, a part of the part is one, for where there is not one, there are not many. Moreover, that which is one is not many. Therefore, matter, insofar as it remains with one entelechy, is not actually many.

Second, I am eager to know whether it is necessary to admit in nature an actual infinity in magnitude, and consequently also in multitude. Tolomei, of course, rejected the first, while defending the second. But do you approve of his view and his solutions? If not, I beg you to refer me to any authority whose lead I could safely follow in defending the infinite, or at least point out briefly the key to the problem, for I do not perceive the false hypotheses on which, according to you, adversaries of the infinite depend, nor have I found anyone who satisfies me.

You indicated on another occasion in the *Mémoires de Trévoux*, when discussing the differential calculus,³ that it is not necessary that the infinite be taken rigorously; and in your "Specimen of Dynamics," after having spoken of infinite degrees of impetus, you say: "although I would not claim on that account that these mathematical entities as such are actually found in nature but only that they are useful for making accurate estimates by means of a mental abstraction."⁴ From what you say in these two places, I would have conjectured that the infinite that you add can be confined to the syncategorematic;⁵ for what prevents us from transferring what you say about degrees of impetus to a multitude of substances? Or do you believe that the plenitude of the world, the uniform divisibility of matter, and the laws of varying motion cannot all be explained unless an actual infinite, strictly speaking, is assumed?

Third, when you say that there is no part of a corporeal substance, nor indeed a part of a part, that does not contain monads, do you mean that precisely the same matter is informed by many entelechies at the same time, or that different parts of matter are informed by different entelechies, one by one, with no part being subjected to many entelechies? I do not imagine it is the first, for otherwise it could be said that any part of matter contains every species of inanimate form at least, and in this way the homogeneity of matter would be established and variety destroyed. Therefore, the second must be asserted. But, since they are in matter, the entelechies (seeing

particulas infinite parvas sortientur, quae tamen ipsae divisibiles rursus erunt. Dividatur ergo earum aliqua. Sane cum Entelechia istae nec destrui possint nec dividi sed nec nova possit produci a natura, alterutrum consequetur, ut ea, cujus materia separata est, Entelechia unam ex partibus a se invicem separatis sequente, remaneat altera materiae pars sine Entelechia, vel ut pars illa deserta accrescat aliis monadibus vicinis, sicque mutetur unitatum substantialium essentia.

4° Animantia bruta non intereunt, alioqui animae eorum, quae non intereunt remanereat in natura inutiles. Quid ergo fiet, si, ut fieri potest, partes machinae organicae, cui animae illae affixae sunt separentur ab invicem?

5° In dissertatione contra Cl. Sturmium, negas dari potentiam quae non sit active motrix. Quid igitur fiet materia, quae utique potentia passiva est?

Denique, dum ais causas secundas acturas, si nullum adsit impedimentum, vel intelligis impedimentum negativum vel positivum: si ais acturas si nullum adsit impedimentum negativum; jam requiris occasionem sive conditionem positivam ad hoc ut homo rideat. Nam impedimentum negativum tollitur tantum per aliquid positivum. Si dicis acturas si nullum adsit impedimentum positivum: Ponamus igitur nihil extare in rerum natura praeter unicam substantiam corpoream constantem materia et Entelechia unica, hoc casu substantia ista infinitas actiones ponet simul, non enim habebit impedimentum positivum. Nec erit ratio quare pauciores ponat, aut quare unam potius ponat, quam aliam.

Praeterea sola anima in homine libera est; igitur machina illius organica producit motum sui liberum aut spontaneum occasione motus spiritualis ab anima producti, quae tamen occasio non sollicitat ut causa sed ut conditio.

Comitiorum nostrorum eventum utique intellexeris. Primo scrutinio, obvenerunt P. Michaeli Angelo Tamburino 40 suffragia, P. Guilielmo Daubentonio 25, P. Joanni Vincentio Imperiali 8, P. Joanni Baptistae Ptolemaeo 4, P. Angelo Alamanno 3, et denique P. Curtio Sestio 1. Cum nemo suffragiorum dimidiam partem obtinuisset, itum est ad scrutinium alterum, quo demum P. Tamburinus suffragia adeptus est 62, P. Daubentinius 20, P. Imperialis 1. Rumor est de Ptolemaeo creando Cardinale.

that they are infinite) will receive, one by one, infinitely small parts of matter, which nonetheless will themselves be divisible in turn. Therefore, any of these parts may be divided. Of course, since the entelechies themselves cannot be destroyed or divided, nor can a new one be produced naturally, one of two things will follow: in those whose matter is divided, either the entelechy stays with one of the separated parts, while the other part of matter remains without an entelechy; or the abandoned part is added to other nearby monads, and thus the essence of substantial unities may be changed.

Fourth, beasts do not perish, for otherwise their souls, which do not perish, would remain useless in nature. What then happens if, as could happen, the parts of an organic machine, to which those souls are attached, are separated from one another?

Fifth, in your essay against the celebrated Sturm, you deny that there is a power that is not actively motive;⁶ what then becomes of matter, which is assuredly a passive power?

Finally, when you say that secondary causes will act if no impediment is present, you understand either a negative impediment or a positive one. If you say that they will act if no negative impediment is present, then you already require a positive occasion or condition for it to happen that a man laughs, for a negative impediment is removed only through something positive. If you say that they will act if no positive impediment is present, let us then suppose that nothing exists in the universe except a single corporeal substance composed of matter and a single entelechy; in this case that substance will presuppose infinite actions at the same time, for it will have no positive impediment, nor will there be any reason to suppose fewer actions, or to suppose one rather than another.

Furthermore, the soul alone is free in man; therefore, its organic machine produces its free or spontaneous motion on the occasion of a spiritual motion produced by the soul, but the occasion does not induce this as a cause but as a condition.

You will no doubt have heard the result of our election. On the first ballot, forty votes went to Father Michelangelo Tamburini, twenty-five to Father Guillaume Daubenton, eight to Father Giovanni Vincenzo Imperiale, four to Father Giovanni Baptista Tolomei, three to Father Angelo Alamanni, and finally one to Father Curzio Sesti.⁷ Since no one received a majority of the votes, it went to a second ballot, in which Father Tamburini at last got sixty-two votes, Father Daubenton twenty, and Father Imperiale one. There is a rumor that Tolomei is to be made a cardinal.⁸

Precor illustrissimae Dominationi tuae iter felicissimum utique sanus ac incolumis brevi ad nos revertaris. Dabam Hildesii 2 Martii 1706.

Illustrissimae Dominationis tuae

Servus Humillimus et obedientissimus

Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Plurimum Reverende Pater

Hoc incommodo tempore, valetudinis causa nonnihil distuli iter. Cum dubitationes Tuae res gravissimas et difficillimas attingant, aequi bonique consules, si praestem, non quae postulat rei dignitas, exigitque acumen Tuum, sed quae ferunt vires meae.

Ens et unum convertuntur, sed ut datur Ens per aggregationem, ita et unum. Etsi haec Entitas Unitasque sit semimentalis.

Numeri, Unitates, Fractiones naturam habent Relationum. Et eatenus aliquo modo Entia appellari possunt. Fractio unitatis non minus est unum Ens, quam ipsa unitas. Nec putandum est, unitatem formalem esse aggregatum fractionum, cum simplex sit ejus notio, conveniens divisibilibus et indivisibilibus, et indivisibilium nulla sit fractio. Etsi materialis unitas seu in actu exercito (sed in genere sumta) apud Arithmeticos ex duabus medietatibus, cum subjectum earum capax est, componatur, ut sit $\frac{1}{2} + \frac{1}{2} = 1$, seu ita verbi gratia, ut valor grossi sit aggregatum valoris duorum semigrossorum. Caeterum ego de substantiis loquebar. Animalis igitur fractio seu dimidium animal non est unum per se Ens, quia non nisi de animalis corpore intelligi potest, quod unum per se Ens non est, sed aggregatum, unitatemque Arithmeticam habet, Metaphysicam non habet. Ut autem ipsa materia, si Entelechia adaequata absit, non facit unum Ens, ita nec ejus pars. Nec video, quid impediatur, multa actu subjici uni Entelechia; Imo hoc ipsum necesse est. Materia (nempe secunda) aut pars materiae existit ut grex aut domus, seu ut Ens per aggregationem.

Infinitem actu in magnitudine non aequae ostendi potest ac in multitudine.

Argumenta contra infinitum actu supponunt: hoc admisso dari Numerum infinitum, item infinita omnia esse aequalia. Sed sciendum, revera

I pray, most distinguished Sir, that you may enjoy a most happy journey and that you will return to us soon healthy and unharmed. From Hildesheim, 2 March 1706.

Your Excellency's most humble and obedient servant,
Bartholomew Des Bosses, S.J.

6. Leibniz to Des Bosses¹

[Hanover, 11 March 1706]

Most Reverend Father,

Given the present conditions, I have delayed my trip somewhat for the sake of my health.² Since your doubts touch on very serious and difficult issues, you will be content if I furnish not what the gravity of the subject requires and your acuteness demands, but what my powers will bear.

Being and one are convertible, but just as there is being by aggregation, so also there is one by aggregation, although this entity and unity are semi-mental.³

Numbers, unities, and fractions have the nature of relations. And to that extent they can in some way be called "beings." A fraction of a unity is no less one being than the unity itself. And it should not be thought that a formal unity is an aggregate of fractions, for its notion is simple, applicable to both divisibles and indivisibles, and there is no such thing as a fraction of indivisibles. Yet a material unity, that is, one actually effected⁴ (but considered in general), is, according to mathematicians, composed of two halves when their subject is able to contain them, just as $\frac{1}{2} + \frac{1}{2} = 1$, or, for example, the value of a groschen is an aggregate of the values of two half-groschen. However, I was speaking of substances. A fraction of an animal, or a half-animal, therefore, is not one being per se, since this can be understood only of the body of the animal, which is not one being per se but an aggregate, and has an arithmetical unity and not a metaphysical unity. But just as matter itself, if it lacks an adequate entelechy, does not make one being, so neither does a part of it. Nor do I see what would prevent many things from actually being subject to one entelechy; on the contrary, this is necessarily so. Matter (that is, secondary matter), or a part of matter, exists in the same manner as a herd or a house, that is, as a being by aggregation.

An actual infinity cannot be demonstrated in magnitude as it can in a multitude.

Arguments against an actual infinity assume that, with this allowed, there exists an infinite number; likewise, that all infinities are equal. But it

aggregatum infinitum neque esse unum totum aut magnitudine praeditum, neque numero constare. Accurateque loquendo loco numeri infiniti dicendum est plura adesse, quam numero ullo exprimi possint; aut loco lineae Rectae infinitae, productam esse rectam ultra quamvis magnitudinem, quae assignari potest, ita, ut semper major et major recta adsit. De essentia numeri, lineae et cujuscunque Totius est, esse terminatum. Hinc etsi magnitudine infinitus esset mundus, unum totum non esset, nec cum quibusdam veteribus fingi posset Deus velut anima mundi, non solum, quia causa mundi est, sed etiam quia mundus talis unum corpus non foret, nec pro animali haberi posset, neque adeo nisi verbalem haberet unitatem. Est igitur loquendi compendium, cum unum dicimus, ubi plura sunt quam uno toto assignabili comprehendere possunt, et magnitudinis instar efferimus, quod proprietates ejus non habet. Quemadmodum enim de Numero infinito dici nequit, par sit an impar; ita nec de recta infinita, utrum datae rectae sit commensurabilis an secus; ut adeo impropriae tantum hae de infinito velut una magnitudine sint locutiones, in aliqua analogia fundatae, sed quae si accuratius examines, subsistere non possunt. Solum absolutum et indivisibile infinitum veram unitatem habet, nempe Deus. Atque haec sufficere puto ad satisfaciendum omnibus argumentis contra infinitum actu, quae etiam ad infinitum potentiale suo modo adhiberi debent. Neque enim negari potest, omnium numerorum possibilium naturas revera dari, saltem in divina mente, adeoque numerorum multitudinem esse infinitam.

Ego philosophice loquendo non magis statuo magnitudines infinite parvas quam infinite magnas, seu non magis infinitesimas quam infinituplas. Utrasque enim per modum loquendi compendiosum pro mentis fictionibus habeo, ad calculum aptis, quales etiam sunt radices imaginariae in Algebra. Interim demonstravi, magnum has expressiones usum habere ad compendium cogitandi adeoque ad inventionem; et in errorem ducere non posse, cum pro infinite parvo substituere sufficiat tam parvum quam quis volet, ut error sit minor dato, unde consequitur errorem dari non posse. R. P. Gouye, qui objecit, non satis videtur mea percepisse.

Caeterum ut ab ideis Geometriae, ad realia Physicae transeam; statuo materiam actu fractam esse in partes quavis data minores, seu nullam esse partem, quae non actu in alias sit subdivisa diversos motus exercentes. Id

must be recognized that an infinite aggregate is in fact not one whole, or endowed with magnitude, and that it cannot be enumerated. And, accurately speaking, in place of “infinite number,” we should say that more things are present than can be expressed by any number; or, in place of “infinite straight line,” that a line is extended beyond any specifiable magnitude, so that there always remains a longer and longer line. It is of the essence of number, of line, and of any whole whatsoever to be bounded. Consequently, even if the world were infinite in magnitude, it would not be one whole, nor could God be imagined to be the soul of the world, as certain ancient authors hold, not only because he is the cause of the world, but also because such a world would not be one body, nor could it be regarded as an animal, and so it would have only a verbal unity. It is therefore a form of shorthand when we say “one” where there are more things than can be comprehended in one specifiable whole, and when we describe as a magnitude something that does not have its properties. For just as it cannot be said of an infinite number whether it is even or odd, so it cannot be said of an infinite line whether it is commensurable or incommensurable with a given line; and so these are simply improper ways of speaking of infinity, as though of one magnitude, which are based on some analogy, but which cannot be upheld when examined more carefully. Only absolute and indivisible infinity has a true unity, namely, God. And this, I think, is enough to satisfy all the arguments against an actual infinity, which also ought to apply to a potential infinity in its own way. For it cannot be denied that in reality there are natures of all possible numbers, at least in the divine mind, and thus that the multitude of numbers is infinite.

Speaking philosophically, I no more support infinitely small magnitudes than infinitely large ones, or no more infinitesimals than infinituples. For I consider both to be fictions of the mind, due to abbreviated ways of speaking, which are suitable for calculation, in the way that imaginary roots in algebra are. Moreover, I have demonstrated that these expressions have a great usefulness for shortening thinking, and thus for discovery, and that they cannot lead to error, since it would suffice to substitute for the infinitely small as small a magnitude as one wishes, so that the error would be less than any given; whence it follows that there can be no error. The Reverend Father Gouye, who objects, does not seem to have sufficiently understood my meaning.⁵

To pass now from the ideas of geometry to the realities of physics, I hold that matter is actually fragmented into parts smaller than any given, or that there is no part of matter that is not actually subdivided into others exercising different motions. This is demanded by the nature of matter and mo-

postulat natura materiae et motus, et tota rerum compages, per physicas, mathematicas et metaphysicas rationes.

Cum dico, nullam partem materiae esse, quae non monades contineat, exemplo rem illustro corporis humani vel alterius animalis, cujus quaevis partes solidae fluidaeque rursus in se continent alia animalia et vegetabilia. Et hoc puto iterum dici debere de parte quavis horum viventium et sic in infinitum.

Nullam Entelechiam puto affixam esse certae parti materiae (nempe secundae) aut quod eodem redit, certis aliis Entelechiis partialibus. Nam materia instar fluminis mutatur, manente Entelechia, dum machina subsistit. Machina habet Entelechiam sibi adaequatam, et haec machina alias continet machinas primariae quidem Entelechia inadaequatas, sed propriis tamen sibi adaequatis praeditas et a priore totali separabiles. Sane et Schola formas partiales admittit. Itaque eadem materia substat pluribus formis, sed diverso modo pro ratione adaequationis. Secus est si intelligas materiam primam seu τὸ δυναμικὸν πρῶτον παθητικόν, πρῶτον ὑποκείμενον, id est potentiam primitivam passivam seu principium resistantiae, quod non in extensione, sed extensionis exigentia consistit, entelechiamque seu potentiam activam primitivam complet, ut perfecta substantia seu Monas prodeat, in qua modificationes virtute continentur. Talem materiam, id est, passionis principium perstare suaeque Entelechiae adhaerere intelligimus; atque ita ex pluribus monadibus resultare materiam secundam, cum viribus derivatis, actionibus, passionibus; quae non sunt nisi entia per aggregationem, adeoque semimentalia, ut iris aliaque phaenomena bene fundata. Caeterum vides, hinc non putandum, Entelechia cuius assignandam portionem materiae infinite parvam (qualis nec datur) etsi in tales conclusiones soleamus ruere per saltum. Comparatione utar: finge circulum, et in hoc describe tres alios maximos quos potes Circulos inter se aequales, et in quovis novo circulo, et inter Circulos interstitio, rursus tres maximos aequales Circulos, quos potes, et sic finge in infinitum esse processum; non ideo sequetur dari circulum infinite parvum, aut dari centrum, quod circulum habeat proprium, cui (contra hypothesin) nullus alius inscribatur.

Quod statuo non interire Animam animalque, rursus comparatione explicabo. Finge animal se habere ut guttam olei, et animam ut punctum aliquod in gutta. Si jam divellatur gutta in partes, cum quaevis pars rursus in guttam globosam abeat, punctum illud existet in aliqua guttarum novarum. Eodem modo animal permanebit in ea parte, in qua anima manet,

tion and by the structure of the universe, for physical, mathematical, and metaphysical reasons.

When I say there is no part of matter that does not contain monads, I illustrate this with the example of the human body or that of some other animal, any of whose solid and fluid parts contain in themselves in turn other animals and plants. And this, I think, must be said again of any part of these living things, and so on to infinity.

I believe that no entelechy is fixed to a specific part of matter (that is, secondary matter) or, what comes to the same thing, to certain other partial entelechies. For matter changes like a river, with the entelechy remaining as long as the machine persists.⁶ The machine has an entelechy adequate to it, and this machine contains other machines obviously inadequate to the primary entelechy, but nevertheless endowed with their own entelechies adequate to them, and separable from the prior whole. The schools of course also admit partial forms. And so the same matter subsists in many forms, but differently, as a function of its adequation.⁷ It is otherwise if you mean primary matter or primary passive power, primary substratum, that is, primitive passive power or the principle of resistance, which consists not in extension but in a prerequisite of extension, and completes the entelechy or primitive active power, with the result that it produces a complete substance or monad, in which modifications are contained virtually. We understand such matter, that is, the principle of passion, to endure and to adhere to its entelechy; and in this way from many monads there results secondary matter, together with derivative forces, actions, and passions, which are only beings through aggregation, and thus semi-mental things, like the rainbow and other well-founded phenomena. Yet you see that it should not be concluded from this that an infinitely small portion of matter (such as does not exist) must be assigned to any entelechy, even if we usually rush to such conclusions by a leap. I shall use an analogy. Imagine a circle; in it draw three other circles that are the same size and as large as possible, and in any new circle and in the space between circles again draw the three largest circles of the same size that are possible. Imagine proceeding to infinity in this way: it does not follow that there is an infinitely small circle or that there is a center having its own circle in which (contrary to the hypothesis) no other is inscribed.

As to my claim that the soul and the animal do not perish, I shall again explain it with an analogy. Imagine an animal as a drop of oil and the soul as some point in the drop. If the drop is now divided into parts, the point will exist in one of the new drops, since any part in turn is transformed into a spherical drop. In the same way, the animal will survive in that part in

et quae ipsi animae maxime convenit. Et uti natura liquidi in alio fluido affectat rotunditatem, ita natura materiae a sapientissimo auctore constructae semper affectat ordinem seu organizationem. Hinc neque animae neque animalia destrui possunt; etsi possint diminui atque obvolvi, ut vita eorum nobis non appareat. Nec dubium est ut in nascendo ita et in denascendo naturam certas leges servare, nihil enim divinorum operum est ordinis expers. Praeterea qui considerat sententiam de conservatione animalis, considerare etiam debet, quod docui, infinita esse organa in animalis corpore, alia aliis involuta, et hinc machinam animaleam et in genere machinam naturae non prorsus destructibilem esse.

Cum dixi omnem potentiam esse active motricem, intellexi haud dubie potentiam activam, et indicare volui, semper actionem aliquam actu sequi ex potentia conatum involvente, etsi contrariis aliarum potentiarum conatibus refractam.

Causae secundae agent, si nullum sit impedimentum positivum; imo, etsi adsit ut dixi, quamvis tunc minus agent.

Ais substantiam unam, si sola poneretur, habituram infinitas actiones simul, quia nil impediat. Respondeo etiam nunc, ubi impeditur, eam infinitas actiones simul exercere: nam ut jam dixi, nullum impedimentum actionem prorsus tollit. Nec mirum est, quod substantia quaevis infinitas exercet actiones ope partium infinitarum diversos motus exercentium; cum quaevis substantia totum quodammodo repraesentet universum, prout ad ipsam refertur; et quaevis pars materiae a quavis alia aliquid patitur. Sed non putandum est, ideo, quia infinitas exercet actiones, quamlibet actionem, et quamlibet aequae exercere, cum unaquaeque substantia determinatae sit naturae. Unam autem substantiam solam existere ex iis est, quae non conveniunt divinae sapientiae; adeoque non fient, etsi fieri possint.

Paragraphi postremae, cujus initium est: *Sola anima in homine libera est* etc, non satis scopum percipio. Quod anima non volvendo, id est qua spiritualis seu libera est, sed ut Entelechia corporis primitiva, adeoque non nisi secundum Leges Mechanicas influat in actiones corporis, jam monui literis praecedentibus. In Schedis autem Gallicis de Systemate Harmoniae praestabilitae agentibus, Animam tantum ut substantiam, non ut simul corporis Entelechiam consideravi, quia hoc ad rem, quam tunc agebam, ad explicandum nimirum consensum inter corpus et Mentem non pertinebat;

which the soul remains and which best agrees with the soul itself. And just as the nature of the liquid in any fluid aims at sphericity, so the nature of the matter constructed by the wisest author always aims at order or organization. From this it follows that neither souls nor animals can be destroyed, although they can be diminished and concealed, so that their life does not appear to us. And there is no doubt that in generation, as also in corruption, nature obeys certain laws, for nothing of divine workmanship is lacking in order. Moreover, whoever reflects on the doctrine of the conservation of animals must also consider, as I have shown, that there are infinite organs in the body of an animal, some enfolded in others; and from this it follows that an animated machine, and in general a machine of nature, is not absolutely destructible.

When I said that every power is actively motive, I certainly meant active power, and I wanted to indicate that some actual action always follows from a power involving endeavor, although it is checked by the contrary endeavors of other powers.

Secondary causes act if there is no positive impediment; indeed they will act, as I have said, even if it is present, although they then act less.

You say that one substance, if we should suppose one alone, would have infinite actions at the same time, since nothing impedes it. I reply that even when it is impeded, it exerts infinite actions at the same time; for, as I have already said, no impediment destroys an action completely. And it is not surprising that any substance exerts infinite actions with the help of infinite parts exercising different motions, for any substance represents the whole universe in some way, according to how it is related to it, and any part of matter is affected in some way by every other. But it should not be thought on this account that, since it exerts infinite actions, it exerts every action whatsoever and every action equally, for each and every substance is of a determinate nature. However, that there should exist one substance alone from among these is something that does not agree with divine wisdom; thus it does not happen, although it could happen.

In the last paragraph, which begins, "The soul alone is free in man," I do not really see the problem. I indicated already in my previous letter that the soul does not influence the actions of the body by deliberating, that is, as something that is spiritual or free, but rather as the primitive entelechy of the body, and thus only according to mechanical laws. In my French essays discussing the system of preestablished harmony, on the other hand, I considered the soul only as a substance,⁸ and not at the same time as the entelechy of the body, since this did not pertain to the matter I was then concerned with, the explanation of the unquestioned agreement between

neque aliud a Cartesianis desiderabatur. Praeterea ad actiones mechanica lege exercitas non Entelechia tantum adaequata corporis organici, sed omnes etiam concurrunt Entelechiaes partiales. Nam vires derivativae cum suis actionibus sunt modificationes primitivarum, quod in Latinis meis cum Sturmio collationibus explicatum est, alterumque alteri conjungi debet.

Intelligis, plerisque objectionibus facile satisfieri, si ad leges formae revocentur. Rem ipsam autem tum maxime patere arbitror, cum in Breviario totius doctrinae conspectus aliquis ob oculos ponitur, qui haberi potest, licet nondum omnes difficultates ad vivum resectae habeantur, cum potius illa ipsa collatione maxime tollantur. Ut taceam vulgo salvis multis difficultatibus systemata stare. Tali ergo operae manus admoliri fructuosissimum putem, et tum appariturum, quid adhuc potissimum desideratur.

Ptolemaeum nostrum sibi gratulari puto, quod honor ei sine onere obtigit, nam publice dignus habitus est qui eligeretur. Opus ejus quod multo dederas, pro quo multas gratias ago, prout jussum erat misi Ro. Patri vestri Ordinis, qui hic vestra sacra obit. Quod superest vale et fave. Dabam Hanoverae 11 Martii 1706.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Cum tempestas in melius mutata videatur, hodie Brunsvigam mox rediturus sum. 17 Martii 1706.

Literas rectius accipio si vecturae ordinariae Hanoveranae, quam si Magistro Postarum Caesareo committantur. Vectura ter minimum per septimanam com meat ultro citroque.

Des Bosses to Leibniz

Illustrissime Domine

Remitto libros quos mihi nuper commodaras; pro quibus ingentes habeo gratias. Lator est unus e nostris qui post transactum Hannoverae octiduum ad nos revertetur. Pervolvi eos magna cum voluptate, illum maxime qui tuas in Pelissonii librum notas ejusque responsa complectitur, in quo si aliud nihil profectum est, luculentum certe controversiae moderate tractandae specimen utriusque partis disputatoribus exhibuistis. Quan-

the body and the mind; nor was anything else expected by Cartesians.⁹ Besides, in actions exerted according to mechanical laws, not only the entelechy adequate to the organic body, but also all partial entelechies, come together. For derivative forces, together with their actions, are modifications of primitive forces, as I explain in my Latin exchange with Sturm;¹⁰ the one must be joined with the other.

You will gather that many objections are easily answered if they are subjected to a formal analysis. But I think the subject is made most clear when an overview of the whole doctrine is placed before the eyes in a summary, which can be done even if all difficulties have not yet been fully addressed, since they are greatly reduced through the comparison itself. Although I would not say so publicly, despite many difficulties the system stands. I therefore think it would be most profitable for a work of this sort to be undertaken, so that there might then appear what until now has been most urgently required.

I suspect our Tolomei is pleased that honor came to him without obligation, for he was universally judged worthy of being elected. As ordered, I sent his work, which you had exchanged with me, for which I am very grateful, to the Reverend Father of your order who is visiting your holy mission here. For the rest, farewell and think kindly of me. From Hanover, 11 March 1706.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. Since the stormy weather seems to have changed for the better today, I shall soon be setting out again for Brunswick. 17 March 1706.

I receive your letters more consistently if you entrust them to the regular Hanover coach rather than to the imperial postmaster. A coach comes and goes at least three times a week.

7. Des Bosses to Leibniz¹

[Hildesheim, 21 May 1706]

Most Distinguished Sir,

I am returning the books you recently lent me, for which I am most grateful. The bearer is a member of our order who will return to us after an eight-day stay in Hanover. I perused the books with great pleasure, especially the one containing your comments on Pellisson's book and his response,² in which, if it accomplished nothing else, you both certainly presented a splendid example of opponents treating both sides of a controversy in a measured way, although it seemed to me to differ little from our

quam nec multum a nobis abesse mihi visus es, nam difficultates si quae restant admissa semel infallibilitate ecclesiae, ut plurimum evanescent. Si enim in philosophia uti me alias verissime monebas, salvis multis difficultatibus systemata stare possunt, id ipsum in religione quae obscuritatem cum certitudine conjunctam habet, multo magis valere debet. Quod etiam scutum prophanorum philosophorum telis, aliquoties opponit Jaquelotius in hoc ipso, quem remitto, libro. Praeiverat illustris Huetius, amicus tuus, in demonstratione evangelica, cujus haec verba sunt propositione quarta initio capitis decimi quarti: ea est demonstrationum ratio, ut veritatis inquisitione ac inventione contentae contrariis argumentis respondere negligant; idque merito quoniam simplex est ac unica veritas, eaque reperta ac demonstrata, quaecumque opponantur falsa esse necesse est. Sed stultus ego qui talia coram te disseram. Orandus potius pater luminum, ut quod in te coepit, perficiat. Quod ego, omnium, qui te colunt, postremus, facio sedulo nec porro facere desinam.

In tua ad Nizolii librum dissertatione praeliminari notisque sparsas hinc inde definitiones reperi, quae mihi salivam moverunt, caeteresque quas a te confectas ajebas, videndi desiderium excitarunt. Pace tua, Vir Illustrissime, parum abest quin irascar historiae isti tuae, quae profundioribus scientiis ad quas illustrandas natus es, te subducit, magna cum jactura boni publici, imo si ausim dicere, gloriae tuae. Nam si de gloria agitur, cedo mihi praestantissimum, quem voles, hujus aevi historicum, cujus cum laude Cartesius philosophicam suam famam permutare vellet si viveret? Scio alios aliter affectos esse, sed et scio plurimos sentire mecum.

A nupero colloquio nostro duae in mentem venere dubitationes quas hic subnecto, tuque pro tua humanitate boni consules.

1. Admissis diversae naturae entelechiis, quid opus est cognitione in brutis? an non diversitas motuum, quam in illis cernimus, in diversas, sed perceptionis expertes entelechias refundi poterit ad eum fere modum quo motus humani corporis negas pendere ab influxu animae saltem ut perceptiva est?

2. Cum caeteris paribus diversus corporis motus prodire non possit nisi a diversa entelechia, sequi videtur, *legem* illam quam S. Paulus *videbat in membris suis, repugnantem legi mentis suae, et captivantem se in lege peccati quae erat in membris ejus*, hanc inquam legem, imo ipsum peccatum originale, quod vel haec ipsa lex est, uti a multis protestantibus assentitur, vel hujus legis radix est, esse Entelechiam quandam, adeoque substantiam vel substantialem uti Flaccius Illyricus asserebat. Sane motus illi

practice, for if any difficulties remain, most vanish once the infallibility of the Church is acknowledged.³ If in philosophy, as you most correctly instructed me elsewhere, a system can remain standing despite many difficulties, this must be all the more true in religion, which contains mystery united with certainty. And indeed, Jaquelot utilizes this defense against the weapons of secular philosophers at several points in the book of his that I am returning.⁴ Your friend, the famed Huet, anticipated him in the *Evangelical Demonstration*, in which these words appear in the fourth proposition at the beginning of chapter 40: “The basis of demonstrations is this, that in the investigation and discovery of truth, disputants fail to respond to opposing arguments, and this justly so, for the truth is simple and unique, and when it has been discovered and demonstrated, it is necessary that whatever is opposed to it is false.”⁵ But I am a fool to talk about such matters in your presence; rather, I should beseech the Father of enlightenment that what he began in you, he may complete—what I, of all those who follow your example, assiduously do and will never cease to do.

In your prefatory essay and notes to Nizolius’s book,⁶ I discovered definitions scattered here and there that whet my appetite, and other things you have talked about achieving arouse my desire to see them. With all due respect, distinguished Sir, I can barely contain my anger at that history of yours, which keeps you from the deeper sciences you were born to elucidate, at a great cost to the public good and, if I dare say so, your glory.⁷ For, as regards glory, tell me whether Descartes, were he alive, would want to exchange his philosophical fame for the renown of the most distinguished historian of the age. I know others who feel differently, but I also know many who agree with me.

From our recent exchange two questions have come to mind, which I add here and which you by virtue of your kindness will regard favorably.

1. With entelechies of a different nature admitted, what need is there of thought in beasts? Could not the differences among the motions that we discern in them be traced back to different entelechies lacking perception, in just the way that you deny that the motion of the human body depends on an influx of the soul, allowing at least that it is perceptive?

2. Since, all other things being equal, a different motion of the body could not arise except from a different entelechy, it seems to follow that the law St. Paul “saw in his limbs, resisting the law of his mind, and holding him captive to the law of sin that was in his limbs”⁸—this law, I say, and indeed original sin itself, which is either this very law, as many Protestants claim, or the ground of this law, is some entelechy, and thus a substance or substantial thing, as Flaccius Illyricus asserted.⁹ Of course, nei-

concupiscentiae, imo nec concupiscentia ipsa inordinata futura erat in natura integra. Quid quod, cum anima ita corpori attemperata sit ut cuilibet motui corporis saltem a nobis perceptibili alius in anima respondeat non liber, fiet ut animam hominis labe originali inquinandi et lege peccati quae est in membris nostris captivandi, aliam omnino esse ab ea necesse sit quae in statu naturae integrae creanda fuisset. Adeoque neminem omnium qui nunc creantur creandum fuisse, imo nec creari potuisse si Adam non peccasset. Imo nec Adam non fortasse potuisse condi eundem si peccaturas non fuerat.

Ptolemaeum tuum sacrorum rituum Consultorem a Pontifice creatum esse Roma nuper accepimus. Erit forsitan hic ad altiora gradus.

Ecquando tandem litteras ad Papebrochium? Jam dudum exspecto eas avide, ut hoc saltem levi obsequio, quando aliter nequeo, benevolentiam honoremque immerenti exhibitos rependere possim.

Illustrissimae Dominationis tuae

Humillimus et obedientissimus in Christo Servus

Barthomomeus Des Bosses SJ

Hildesiae 21 Maji 1706.

Leibniz to Des Bosses

Admodum Reverende Pater

Libros quos remiseras recte accepi. Utinam esset in quo Tibi utilior esse possem. Hactenus distractissimus, nunc primum respondendi officio satisfacio, et morae veniam peto.

Credo si superfuisset diutius Pelissonius, utile aliquid praestare potuisse. Sed Meldensis Episcopus, (qui cum continuatum est aliquandiu commercium) quanquam superior illo scientia Theologica, tamen si dicere fas est, inferior visus est humanitate.

Fateor demonstratione certe nobis data non esse necesse nostri gratia (sed tantum propter alios) ut objectionibus respondeamus: sed hoc tamen nobis semper prodesse puto, cum difficilis objectio est, neque unquam esse defugiendum a peritis. Sublata enim speciosa difficultate nova lux af-

ther the motion of that desire nor indeed the future desire itself was unordered with respect to nature as a whole. For this reason, since the soul is adjusted in such a way to the body that something else in the soul that is not free corresponds to each motion of the body (at least if it is perceivable by us), it will follow that it is necessary that any other human soul that might have been created in the entire course of nature would have had to be tainted by the original stain and held captive by the law of sin that is in our limbs. Thus, not one of all those who are now created would have been created, indeed they could not have been created, if Adam had not sinned. Indeed, perhaps the same Adam could not have been produced if he were not going to become a sinner.

We recently heard from Rome that the pope has made your Tolomei counselor of the sacred rites. He will perhaps move on to higher things from here.

Will you at any time finally have a letter for Papebroch?¹⁰ I have long been eagerly awaiting one, so that, unable to do anything else, I might repay with at least this small service the kindness and honor shown to an undeserving man.

Your Excellency's most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.
Hildesheim, 21 May 1706

8. Leibniz to Des Bosses¹

[Hanover, 11 July 1706]

Most Reverend Father,

I received safely the books you returned. Would that there were a way I could be more useful to you. Having been very preoccupied lately, I am now for the first time able to fulfill the duty of responding and I ask your forgiveness for the delay.

I believe that if Pellisson had lived longer he could have accomplished something useful. The bishop of Meaux,² who corresponded with him for a long time, was superior to him in his knowledge of theology, yet seemed to be—if I may be permitted to say so—inferior to Pellisson in his humanity.

I admit that when we are given a certain demonstration, it is not necessary to respond to objections for our own sake, but only for the sake of others. Nevertheless, I think it is always a good thing to do for ourselves when the objection is a difficult one, and an experienced person should never avoid doing so, for new light may shine when a specious difficulty is re-

fulget. Itaque ego, etsi passim certus sententiarum, tamen objectiones amo plausibiles, et puto semper satisfieri posse: nam si qua esset invicta, ea demonstrationem in contrarium faceret. Nec video cur argumentum magis sit demonstratio affirmationis, quam objectio negationis. Itaque non largior Baylio aut alteri cui quam posse rationem fidei argumenta insolubilia opponere, neque cum Huetio et Jaquelotio (etsi viris insignibus et mihi amicis) tantum adversariis concedere velim.

Do operam, ut, quam primum licebit, Deo volente, campo Historico excedam, opere effecto.

Ad binas dubitationes Tuas venio: Cum perceptio nihil aliud sit, quam multorum in uno expressio, necesse est omnes Entelechias seu Monades perceptione praeditas esse. Neque ulla naturae Machina sua Entelechia propria caret. Meae enuntiationes universales esse solent, et servare Analogiam.

Peccatum originale nec Entelechia nec substantia esse potest: cum non sit aliquod animal vel quasi-Animal, nec Anima ejus; sed imperfectio quaedam nostrae Animae, cui et imperfectio in corpore nostro respondet. Quemadmodum Horologii vel alterius Machinae imperfectio orta, si placet, ex Elasmate debilitato, Machina utique non est.^{L1}

Quoniam ita permittis literas Antverpian destinatas hic adjungo. Vale et me ama. Dabam Hanoverae 11 Julii 1706.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Contra quendam Ptolemaei nostri viri summi librum novum censores (qui persaepe morosi, et in invidiam proni sunt) nescio quid movisse intellexi. Literas mihi Hildesiae semper per Luneburgicam, non per Caesaream mitti postam peto.

L1. BRACKETED IN DRAFT: Puto non tantum motui corporis a nobis apperceptibili, sed et alteri cuicunque perceptionem in nobis respondere, sed quam non animadvertimus, ob talium perceptionum multitudinem, exiguitatem et confusionem. Uti assueti strepitus (qualis molendini vicini nostris aedibus) apperceptione carere solemus.

Primus homo utique alius condi poterat, et posterius ejus, sed Deus eam seriem possibilium elegit in qua peccatum praevidebat, quod ea aliunde praestaret. Nam etsi quidam vestrorum dubitent, ego pro certo habendum censeo, Deum fecisse quod optimum erat factu. Nunc autem electa serie, in uno quoque individuo omnia alia sed salva libertate involvuntur.

moved. Thus, although I myself am certain of all my views, I nonetheless love plausible objections and believe they can always be dealt with, for if there were one that went unrefuted it would demonstrate the opposite. I do not see why an argument is more a demonstration of an affirmation than a refutation of its negation. Thus, I do not agree with Bayle, or anyone else, that reason can raise irrefutable arguments against faith, nor would I want to concede so much to opponents as do Huet and Jaquelot (though they are excellent men and my friends).

I am working hard, primarily so that I may retire, God willing, from the field of history, when the work is completed.

I come now to your two questions. Since perception is nothing but the expression of many things in one, it is necessary that all entelechies or monads be endowed with perception. And no natural machine lacks its own entelechy. My propositions are usually universal and preserve analogy.³

Original sin can be neither an entelechy nor a substance, for it is not some animal or quasi-animal, nor its soul, but a certain imperfection of our soul, to which there also corresponds an imperfection in our body. In the same way, if it is decided that the imperfection of a clock or some other machine arises from a defective spring, it certainly does not arise from the machine.^{L1}

Since you allow me to do so, I add here a letter destined for Antwerp.⁴ Farewell and think kindly of me. From Hanover, 11 July 1706.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I have heard that the censors (who very often are hypercritical and inclined to envy) have set in motion I know not what process against a recent book by our great Tolomei. I ask that letters from Hildesheim always be sent to me by way of Lüneberg and not by the imperial post.

L1. BRACKETED IN DRAFT: I think that there is in us perception that corresponds not only to bodily motion of which we can be aware but also to any other bodily motion, though we do not notice this on account of the multitude, minuteness, and confusion of so many perceptions. Thus, we ordinarily lack any awareness of a familiar noise (such as that of a mill next to our house).

The first man, to be sure, could have been created differently, and his descendants as well, but God chose that series of possibles in which he foresaw sin, because it was superior to the others. Although certain of the ancients doubted it, I believe it must be regarded as certain that God has done the best that could have been done. Now, with the series chosen, in any one individual everything involves everything else, yet freedom is preserved.

Des Bosses to Leibniz

Illustrissime Domine

Distuli responsum ad postremas I.D.T. litteras, quod Papebrochii responsorias expectarem una mittendas, quae necdum advenerunt. Significandum interim duxi, esse hic adolescentem qui post octiduum Romam cogitet futurus ibidem Alumnus Collegii Germanici, et Ptolemaeum magistrum auditurus. Qua occasione si quae forsan habes quae Ptolemaeo communicata velis, poterunt commodissime transmitti.

Roma intelligimus proscriptas nuper e Scholis nostris esse triginta propositiones philosophicas, e Cartesio Malebranchioque fere depromptas, quarum aliquas quia circa materiam a te praeclare elucidatam versantur, et censura jam pridem tuo calculo comprobata est, hic a me adduci non aegre feres.

6^a Modi vel Accidentia, in aliquo subjecto semel producta non amplius indigent actione positiva cujusquam Causae ipsa conservantis, sed tamdiu durare debent donec positiva actione Causae alicujus externae destruantur.

7^a Ut aliquid de Quantitate Motus a Deo primum indita Materiae perissequeretur, Deum oporteret fingi mutabilem et inconstantem.

10^a Essentia Materiae seu Corporis in Extensione consistit externa et actuali.

16^a Est in Mundo certa ac definita Quantitas Motus, quae nec aucta unquam, nec imminuta fuit.

19^a Solus Deus est qui movere potest corpora; Angeli vero, Anima rationalis, ipsaque corpora non sunt causae motus efficientes, sed occasionales tantum.

20^a Creaturae non producunt Efficienter ullos Effectus, sed solus Deus illos ad praesentiam illarum efficit: loca vero Scripturae, in quibus creaturis tribuitur actio, intelligenda sunt sensu figurato.

21^a Belluae sunt mera Automata, omni sensu et cognitione carentia.

22^a Animae Rationalis unio cum corpora in eo solum consistit, quod Deus voluerit ad certas mutationes corporis, certas in anima perceptiones aut motus excitari, et vice versa pro certis animae cogitationibus seu voluntatibus certos in corpore motus sequi.

23^a Hanc motuum et affectionum communicationem non exigit ipsa corporis animaeque natura sed solum decretum Dei liberum.

9. Des Bosses to Leibniz¹

[Hildesheim, 20 August 1706]

Most Distinguished Sir,

I have put off a response to your Excellency's latest letter because I anticipated sending it at the same time as Papebroch's reply, which has not yet arrived. In the meantime, I find it worth noting that there is a young man here who after an eight-day stay in Rome may decide to become a student at the German College there and a pupil of Tolomei. If you happen to have anything you would like communicated to Tolomei, it could be sent very easily by this means.

We understand that in Rome thirty philosophical propositions, mostly drawn from Descartes and Malebranche, have recently been proscribed by our schools.² As some of them concern material that has been clearly explained by you, and the censure has already long been supported by your account, you will not object if I present them here.

6. Once they have been produced in some subject, modes or accidents no longer require the positive action of any cause that is conserving them but instead must endure until they are destroyed by the positive action of some external cause.

7. In order that it may be believed that some of the quantity of motion originally placed in matter by God has been lost, it is necessary to suppose that God is mutable and inconstant.

10. The essence of matter or body consists in external and actual extension.

16. There is in the world a fixed and definite quantity of motion, which has never been increased or decreased.

19. It is God alone who can move bodies; angels, a rational soul, and bodies themselves are not really efficient causes of motion, but only occasional causes.

20. Created things do not produce any effects through efficient causation; rather, God alone brings them about in the presence of created things. The places in scripture where action is attributed to created things must be understood figuratively.

21. Beasts are mere automata, lacking all sensation and thought.

22. The union of the rational soul with the body consists in this alone, that God willed that for certain changes of the body, certain perceptions or motions are excited in the soul; and, vice versa, that in conformity with certain thoughts or volitions in the soul there follow certain motions in the body.

23. This communication of motions and affections is not required by the very nature of body and soul but only by God's free decree.

25 Corpora Mixta, etiam Brutorum non aliter differunt inter se, quam ex varia magnitudine, situ, figura, textura, quiete vel motu atomorum sive particularum materiae insensibilium quibus constant.

28 Nullae sunt formae substantiales corporeae a materia distinctae.

Gratulor censoribus nostris quod te conspirantem imo ducem nacti sint.

Breve tuum, sed succi plenum ad binas dubitationes meas postremas responsum, amplum meditandi campum mihi suppeditavit, qua de re scribam ad te prolixius, ubi Papebrochii litteras accepero. Vale et tuae mihi benevolentiae honorem conserva. Dabam Hildesii 20 Augusti 1706.

Illustrissimae Dominationis tuae

Humillimus et obsequentissimus Servus in Christo

Bartholomeus Des Bosses SJ

P.S. Inter relegendum video omissam esse a me propositionem ^{4^{am}} quae sic habet: *Mens nostra eo quod finita sit, nihil certi de infinito potest scire, proindeque a nobis disputari de illo nunquam debet.* Cujus falsitatem utinam aliquando in promisso a te *de scientia infiniti* libro demonstratam legamus.

Leibniz to Des Bosses

Admodum Reverende Pater

Fautor Honorande

Litteras Tuas gratissimas cum Janningianis recte accepi. R. P. Janningio respondebo, ubi Lipsia responsum accepero, quorsum ejus Epistolam misi. Gaudeo optimum et de Historia meritissimum Virum, Danielelem Papebrochium, visum recuperasse, et ea aetate valere ac laborare in magno opere quod cum sociis strenue urget.

Magno Ptolemaeo vestro quod nunc scribam non habeo: nam hoc anno amplas jam ad eum dedi litteras, quas perlatas spero.

Gratias etiam ago quod mecum communicasti propositiones quasdam ex illis quas in vestris Collegiis doceri superiores nolunt. Quod si omnes obtinere licet, gratissimum hoc mihi foret. Memini videre olim editum similium propositionum indiculum, quas P. Mutius Vitellescus, si bene memini, censura notari curaverat. Ego libenter has censuras vel vestras, vel aliorum cognosco, neque contemno: pertinet enim ea res ad formulas caute loquendi; et offensiones non necessariae merito vitantur.

Ut paucula annotem ad eas quas communicasti mecum, dixerim ad

25. Mixed bodies, including those of beasts, do not differ from one another except with respect to differences in the size, position, shape, texture, and motion or rest of the atoms or insensible parts of matter from which they are composed.

28. There are no corporeal substantial forms distinct from matter.

I am happy that our censors have found you such an agreeable guide.

Your brief but powerful reply to my last two objections provided me with much to meditate on, about which I shall write to you at greater length when I have received Papebroch's letter. Farewell and bestow on me the honor of your favor. From Hildesheim, 20 August 1706.

Your Excellency's most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.

P.S. I see that I omitted from the above list the fourth proposition, which goes as follows: "Our mind, insofar as it is finite, can know nothing certain about the infinite; consequently, we should never engage in disputes about it." I trust that the falsity of this will be demonstrated once we read the book you have promised on the science of the infinite.

10. Leibniz to Des Bosses¹

[Hanover, 1 September 1706]

Most Reverend Father, Honored Supporter,

I received safely your most welcome letter, along with that of Janninck. I shall reply to the Reverend Father Janninck when I have had a response from Leipzig, where I forwarded his letter. I am pleased that that excellent man and most worthy historian Daniel Papebroch seems to have recovered and that he is at his age well and working on the great project that he and his colleagues are actively pushing forward.²

I have nothing to write at the moment to your great Tolomei, for I have already sent him a long letter this year, which I hope has reached him.³

I thank you very much for sharing with me some of the propositions from among those which the authorities do not want to be taught in your colleges. If it is possible to obtain all of them, I should be most grateful. I recall seeing once a published document of similar propositions, which Father Mutius Vitelleschi, if I remember correctly, had arranged to have banned by the censor.⁴ I readily acknowledge these censors, whether they are yours or from other orders, and do not find fault with them: for this matter is concerned with the rules for speaking cautiously, and unnecessary offenses are rightly avoided.

By way of making a few points about those you have shared with me, I

6tam, verum quidem esse, quod modus semel inductus per se duret sed cum substantia; quoniam tamen non per se subsistit, semper emanabit ex substantia.

Ad 7. Puto ego non quidem quantitatem motus, sed tamen virium a Deo conservari, naturaliter scilicet agendo. Interim hoc non ducitur ex constantia Dei, nec ideo Deus est inconstans, quod aliquid mutat, cum constans esse possit in aliqua ratione vel lege superiore, ex qua mutatio fluit in negotio inferiore.

Ad 10. jam dudum exposui mentem meam. Prop. 16. etiam ipse refutavi publice, sed pro quantitate motus substituo ut dixi quantitatem virium eamque (naturaliter) conservari censeo.

19. Sentio motum et entelechiam omnem secundam ex prima fluere, adeoque creaturas esse activas. Etsi interim leges cogitationum et leges motuum a se invicem sint independentes.

Ad 20 idem dico quod ad 19.

21. Bruta puto perfecta esse Automata, et tamen simul habere perceptionem.

Ad 22. Cum Anima sit Entelechia primitiva corporis, utique in eo consistit Unio; sed consensus inter perceptiones et motus corporeos ex harmonia praestabilita intelligibiliter explicatur.

Ad 23. Valde improbavi in Cartesianis quod putant inter objecta et nostras de iis sensiones arbitriam tantum esse connexionem, et in Dei fuisse arbitrio, an odores vellet repraesentare per perceptiones quae nunc sunt colorum; quasi non Deus omnia summa ratione faciat, aut quasi circulum per triangulum repraesentaturus sit, naturaliter operando.

Ad 25. Verum est omnia phaenomena corporum naturalia (praeter perceptiones) posse explicari per magnitudinem figuram et motum. Sed ipsi motus (qui sunt causae figurarum) non possunt explicari nisi advocatis Entelechiis.

29. Nullas esse formas substantiales corporeas a materia distinctas, recte rejicitur, si per formas corporeas intelligantur quales sunt animae brutorum, quae scilicet reflexivo mentis actu seu cogitatione proprie dicta carent. Interim si quis exigeret formas corporeas interitui naturaliter obnoxias, ei fateor non possem adhaerere. Nam cum Thomistis sentio omnes Entelechias primitivas indivisibiles esse, seu quod appello Monades. Talius autem neque origo neque interitus naturaliter intelligi potest.

should say in response to 6, that it is indeed true that once introduced, a mode endures through itself, albeit with a substance; however, since it does not subsist through itself, it will always emanate from a substance.

Concerning 7, I think it is certainly not the quantity of motion but rather the quantity of force that is conserved by God, when he acts naturally. However, this is not derived from God's immutability, nor is God therefore mutable because he changes something, for immutability can reside in some higher reason or law, from which change arises in a lower thing.

Concerning 10, I explained my view some time ago. I even refuted Prop. 16 publicly; however, for quantity of motion I substitute, as I said, quantity of force, and I hold that this is (naturally) conserved.⁵

Concerning 19, I believe that motion and every secondary entelechy arise from a primary one, and thus that creatures are active. Nevertheless, the laws of thought and the laws of motion are independent of each other.

Concerning 20, I say the same as in the case of 19.

Concerning 21, I believe beasts are perfect automata and nonetheless also have perception.

Concerning 22, since the soul is the primary entelechy of the body, the union at least consists in that; but the agreement between perceptions and bodily motions is intelligibly explained by means of preestablished harmony.⁶

Concerning 23, I am extremely critical of Cartesians because they hold that there is only an arbitrary connection between objects and our sensations of them, and that it would have been within God's will, even if he had wanted to represent odors through the perceptions that are now of colors, as if God does not do everything in accordance with the highest reason, or as if, operating naturally, he might be about to represent a circle by a triangle.

Concerning 25, it is true that all the natural phenomena of bodies (besides perceptions) can be explained through size, shape, and motion. But motions themselves (which are the causes of shapes) cannot be explained except by invoking entelechies.

Concerning 28,⁷ it is rightly rejected that there are no corporeal substantial forms distinct from matter, if by corporeal forms are understood those such as the souls of beasts, which certainly lack reflective mental acts, or thought in the strict sense. However, if someone required that corporeal forms be naturally subject to destruction, I confess that I could not join him. For I hold with the Thomists that all primary entelechies are indivisible, or what I call monads. And neither the origin nor the destruction of such things can be understood naturally.

Quartam ni fallor jam refutarunt Mathematici, et non pauca ipse edidi scientiae infiniti specimina. Interim sentio proprie loquendo infinitum ex partibus constans neque unum esse, neque totum, nec nisi per fictionem mentis concipi ut quantitatem. Solum infinitum impartibile unum est, sed totum non est; id infinitum est Deus. Vale et fave. Dabam Hanoverae 1 Septemb. 1706.

Deditissimus

G. G. Leibniti

I [Supplementary Study]

Datur infinitum Syncategorematicum, seu potentia passiva partes habens, possibilitas scilicet ulterioris in dividendo, multiplicando, subtrahendo, addendo progressus. *Datur et infinitum Hypercategorematicum* seu potestativum, potentia activa habens quasi partes, eminenter, non formaliter aut actu. Id infinitum est ipse Deus. Sed *non datur infinitum Categorematicum* seu habens actu partes infinitas formaliter.

Datur etiam infinitum actuale per modum totius distributivi non collectivi. Ita de omnibus numeris aliquid enuntari potest, sed non collective. Sic dici potest cuilibet pari respondere suum imparem et vicissim; sed non ideo accurate dicitur aequalem esse multitudinem parium et imparium. I

Des Bosses to Leibniz

Illustrissime Domine

P[ax] C[hristi]

Mitto propositiones quas cupis, missurus etiam non petenti, ut tuum de reliquis iudicium intelligam: tantum ne facile divulgentur. Valde mihi gratae fuerunt breves illae notae tuae; tametsi quoad plerasque sententiam tuam habere perspectam videbar. Nec dubito quin illo fere sensu, quem tu quoque improbas, censoribus nostris displicuerint; decimam nonam si excepero. Nam dum Angelos, qui Entelechiai corporis non sunt, causas motus plus quam occasionales esse volunt, motuum a cogitationibus dependentiam exigere aliquam videntur. Nisi tamen forte efficientia ista angelica per quandam cum Entelechiis analogiam explicari posset. Nam Animas rationales quod attinet, satis erit, opinor, si ut entelechiai motum efficiant. Atque hic scire aveo quid de nupera Turneminii hypothesis sen-

Unless I am mistaken, mathematicians have already refuted the fourth proposition, and I myself have published some samples of the science of the infinite. However, I maintain, strictly speaking, that an infinite composed from parts is neither one nor a whole, and it is not conceived as a quantity except through a fiction of the mind. The indivisible infinite alone is one, but it is not a whole; that infinite is God.

Farewell and think kindly of me. From Hanover, 1 September 1706.

Most faithfully,

G. W. Leibniz

I [Supplementary Study]⁸

There is a syncategorematic infinite or passive power having parts, namely, the possibility of further progress by dividing, multiplying, subtracting, or adding. In addition, *there is a hypercategorematic infinite*, or potestative infinite, an active power having, as it were, parts eminently but not formally or actually. This infinite is God himself. But *there is not a categorematic infinite* or one actually having infinite parts formally.

There is also an actual infinite in the sense of a distributive whole but not a collective one. Thus, something can be stated about all numbers, though not collectively. In this way it can be said that for every even number there is a corresponding odd number, and vice versa; but it is not therefore accurately said that there is an equal multitude of even and odd numbers. I

11. Des Bosses to Leibniz¹

[Hildesheim, 17 September 1706]

Most Distinguished Sir,

The Peace of Christ,

I am sending the propositions you desire; I was about to send them even if you had not asked, so that I might learn your opinion about the rest: only be careful not to let them be made public. I was very grateful for your brief comments, though for the most part I seemed to have grasped your view. I have no doubt that the propositions were displeasing to our censors in just the sense in which you also deny them, omitting the nineteenth. For when they want angels, which are not entelechies of a body, to be more than occasional causes of motion, they seem to require some dependence of motions on thoughts, unless perhaps this angelic efficacy can be explained through some analogy with entelechies; for as far as rational souls are concerned, it will be enough, in my view, if they produce motion as entelechies do. And here I am eager to know what you think of Tournemine's

tias; Tum etiam, ecquid tibi videatur de ratione qua Aristoteles contra philosophos antiquos vacuum ad motum esse necessarium contententes demonstrare nititur potius, corpus si in vacuo moveretur, in instanti movendum esse, atque adeo motum in vacuo esse non posse.

P. Mutius Vitelleschus varias propositiones a nostris doceri vetuerat ille quidem sed earum catalogus cum insigni auctario in congregatione nona postea confectus, et a P. Francisco Picolomineo primum missus est ad provincias Anno 1651, continetque propositiones universim 65.

Dicebas in penultimis tuis Peccatum Originale nec Entelechiam esse nec substantiam, sed imperfectionem quandam animae nostrae, cui et imperfectio in corpore nostro respondet. Duo regero.

1. Si peccatum originale in imperfectione quadam animae nostrae situm est ergo nihil positivum impedit animam quominus agat, uti actura fuerat si non peccasset. Loquor de motibus indeliberatis, non de liberis.

2. Imperfectio corporea quae respondet imperfectioni animae infectae peccato originali, negatio esse non potest, quia causat vere motus in natura lapsa non orituros in natura integra, debet igitur esse substantia vel entelechia, cum sit virtus agendi.

Contra profundam tuam definitionem perceptionis: *multorum in uno expressio*, occurrit 1^o quod videantur aliquae pereceptiones circa unum tantum objectum versari; quomodo ergo erunt expressiones multorum? Adde quod creaturae irrationales non percipiant universalialia, ad quod nihil requiri videtur quam ut haberent perceptiones multa in uno exprimentes. Denique si omnis machina naturae Entelechiam habet perceptione praeditam, erit igitur animal. Quid enim est aliud animal quam machina naturae habens Entelechiam perceptionem praeditam? Alia quaedam in mentem veniunt, quibus supersedeo quod mentem tuam non satis assecutum me censeam. Vale, illustrissime domine, mihi que favere perge. Dabam Hildesiae 17 Septembris 1706.

Illustrissimae Dominationis tuae

Humillimus et obedientissimus servus in Chto

Bartholomeus Des Bosses SJ

1. Mens Humana de omnibus dubitare potest ac debet, praeterquam quod cogitet, adeoque existat.

2. Reliqua non prius nobis certa et explorata esse possunt, quam clare innouerit Deum existere summeque bonum esse, non fallacem, qui mentem nostram inducere in errorem velit.

recent hypothesis; also, whether you approve at all of the argument by which Aristotle, against ancient philosophers who insist that a void is necessary for motion, instead tries to demonstrate that, were a body moved in a void, it would have to be moved in an instant, and thus that there cannot be motion in a void.²

It was indeed Father Mutius Vitelleschi who prohibited certain propositions from being taught by us, but the authorized index of these was completed later in the ninth congregation. It was first sent to the provinces by Father Francisco Piccolomini in 1651 and contains sixty-five propositions in all.³

You said in your next-to-last letter that original sin is neither an entelechy nor a substance, but some imperfection of our soul, to which also corresponds an imperfection in our body. I make two replies:

1. If original sin is located in some imperfection of our soul, then nothing positive impedes the soul from acting as it would have acted if it had not sinned. I am speaking of involuntary movements, not of free ones.

2. The bodily imperfection that corresponds to the imperfection of a soul corrupted by original sin cannot be a negation, since it actually causes motions in a fallen nature that would not arise in an uncorrupted nature; therefore, it must be a substance or an entelechy, since it is a power of acting.

Against your profound definition of perception, “the expression of many things in one,”⁴ it occurs to me, first, that there seem to be some perceptions that are focused upon only one object; how, then, will they be expressions of many things? Add to this that irrational creatures do not perceive universals, for which nothing seems to be required except that they should have perceptions expressing many things in one. Finally, if every machine of nature has an entelechy endowed with perception, it therefore will be an animal, for what else is an animal but a machine of nature having an entelechy endowed with perception? I pass over some other points that come to mind, for I suspect I have not sufficiently understood your view. Farewell, most distinguished Sir, and continue to favor me. From Hildesheim, 17 September 1706.

Your Excellency's most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.

1. The human mind can and should doubt everything except that it thinks, and that to this extent it exists.

2. Nothing else can be certain and settled for us before it has become known clearly that God exists and is supremely good, not a deceiver who wishes to lead our mind into error.

3. Ante certam notitiam divinae existentiae dubitare semper quisque posset ac deberet, an non talis naturae conditus fuerit ut in omni iudicio suo fallatur, etiam in iis quae certissima et evidentissima ipsi apparent.

4. Mens nostra, eo quod finita sit nihil certi de infinito potest scire, proindeque a nobis disputari de illo nunquam debet.

5. Non nisi per fidem divinam certe cognoscere quisquam potest quod aliqua existant corpora, ne suum quidem.

6. Modi vel accidentia in aliquo subjecto semel producta, non amplius indigent actione positiva cujusquam causae ipsa conservantis, sed tamdiu durare debent donec positiva actione causae alicujus externae destruantur.

7. Ut aliquid de quantitate motus a Deo primum indita naturae periisse videretur; Deum oporteret fingi mutabilem et inconstantem.

8. Nulla substantia neque spiritualis, neque corporea potest vel ab ipso Deo ad nihilum redigi.

9. Essentia cujusque rei sic pendet a libero Dei voluntate, ut in aliquopiam rerum ordine, quem illi condere liberum fuit, alia foret, quam nunc est, essentia proprietatesque V.G. materiae, spiritus, circuli etc.

10. Essentia materiae seu corporis in extensione consistit externa et actuali.

11. Nulla materiae portio quidquam de sua extensione potest amittere, quin tantundem illi pereat de sua substantia.

12. Penetratio corporum proprie dicta, et locus omni corpore vacuus involvunt contradictionem.

13. Ubicunque imaginari possumus extensionem esse localem, V.G. supra coelum, ibi reipsa spatium existit plenum corpore aliquo seu materia.

14. Mundi extensio indefinita est in seipsa.

15. Mundus existere non potest nisi unicus.

16. Est in mundo certa ac definita quantitas motus quae nec aucta, nec imminuta unquam fuit.

17. Nullum corpus moveri potest, quin reipsa moveantur simul et caetera sive a quibus recedit sive ad quae accedit.

18. Corpus moveri nihil est aliud, nisi illud a Deo conservari aliis atque aliis in locis successive.

19. Solus Deus est qui movere possit corpora: Angeli vero, Anima rationalis, ipsaque corpora, non sunt causae motus efficientes, sed occasionales tantum.

3. Prior to the certain knowledge of divine existence, each person can and should always doubt whether he has not been created with such a nature that he is deceived in all his judgments, even in those that appear most certain and most evident to him.

4. Our mind, insofar as it is finite, can know nothing certain about the infinite; consequently, we should never engage in disputes about it.

5. Only through divine faith can anyone know with certainty that any bodies exist, even his own.

6. Once they have been produced in some subject, modes or accidents no longer require the positive action of any cause that is conserving them but instead must endure until they are destroyed by the positive action of some external cause.

7. In order that it may be believed that some of the quantity of motion originally placed in matter by God has been lost, it is necessary to suppose that God is mutable and inconstant.

8. No substance, either spiritual or corporeal, can be reduced to nothing, not even by God himself.

9. The essence of any thing depends on the free will of God in such a way that in any other order of things that he was free to create, the essence and properties of, for example, matter, a spirit, a circle, etc., might be different than they are now.

10. The essence of matter or body consists in external and actual extension.

11. No portion of matter can give up anything of its extension, unless just as much is lost from its substance.

12. Strictly speaking, the penetration of bodies and a place devoid of all body involve a contradiction.

13. Wherever we can imagine extension to be located, for example, above the heavens, there in fact exists there space filled by some body or matter.

14. In and of itself, the extension of the world is indefinite.

15. Only a single world can exist.

16. There is in the world a fixed and definite quantity of motion, which has never been increased or decreased.

17. No body can be moved unless all the rest of the bodies from which it recedes or which it approaches are moved at the same time.

18. For a body to be moved is nothing but for it to be conserved by God in one place and then in another successively.

19. It is God alone who can move bodies; angels, a rational soul, and bodies themselves are not really efficient causes of motion, but only occasional causes.

20. Creaturae non producant efficienter ullos effectus, sed solus Deus illos ad ipsarum praesentiam efficit. Loca vero scripturae in quibus creaturis tribuitur actio, intelligenda sunt sensu figurato.

21. Belluae sunt mera automata omni sensu et cognitione carentia.

22. Animae rationalis unio cum corpore in eo solum consistit, quod Deus voluerit ad certas mutationes corporis certas in anima perceptiones, aut motus excitari et vice versa pro certis animae cogitationibus seu voluntatibus certos in corpore motus sequi.

23. Hanc motuum et affectionum communicationem non exigit ipsa corporis animaeque natura sed solum decretum Dei liberum.

24. Calor, frigus, lumen, color, sonus, et aliae quae vocantur qualitates sensibiles, affectiones sunt sive modificationes solius mentis, non corporum ipsorum quae dicuntur calida, frigida etc.

25. Corpora mixta, etiam brutorum, non aliter differunt inter se quam ex varia magnitudine, situ, figura, textura, quiete vel motu atomorum, sive particularum materiae insensibilium quibus constant.

26. Mens apprehendendo seu percipiendo non agit sed est facultas mere passiva.

27. Iudicium et illatio sunt actiones non intellectus, sed voluntatis.

28. Nulla sunt formae substantiales corporeae a materia distinctae.

29. Nulla sunt accidentia absoluta.

30. Systema Cartesii defendi potest tanquam hypothesis, cujus principia et postulata inter se et cum conclusionibus recte cohaerent.

Leibniz to Des Bosses

Admodum Reverende Pater

Gratias ago pro communicatione propositionum nuper apud vos reprobatarum, quarum indiculum utique tam mature in vulgus spargi necesse non est.^{L1}

L1. DRAFT: est. | De Angelis mea sententia est quae multorum veterum Ecclesiae doctorum esse Mente et corpore praeditos, ut homines; etsi multo majore in illis sit perfectio utriusque. Et revera arbitror unum Deum esse substantiam a materia sep-

20. Created things do not produce any effects through efficient causation; rather, God alone brings them about in the presence of created things. The places in scripture where action is attributed to created things must be understood figuratively.

21. Beasts are mere automata, lacking all sensation and thought.

22. The union of the rational soul with the body consists in this alone, that God willed that for certain changes of the body, certain perceptions or motions are excited in the soul; and, vice versa, that in conformity with certain thoughts or volitions in the soul there follow certain motions in the body.

23. This communication of motions and affections is not required by the very nature of body and soul but only by God's free decree.

24. Heat, cold, light, color, sound, and the other things called sensible qualities are affections or modifications of the mind alone, not of the bodies themselves that are called hot, cold, etc.

25. Mixed bodies, including those of beasts, do not differ from one another except with respect to differences in the size, position, shape, texture, and motion or rest of the atoms or insensible parts of matter from which they are composed.

26. In apprehending and perceiving the mind does not act but rather is a purely passive faculty.

27. Judgment and inference are actions not of the intellect but of the will.

28. There are no corporeal substantial forms distinct from matter.

29. There are no absolute accidents.

30. The Cartesian system can be defended as a hypothesis, whose principles and postulates agree very well among themselves and with the conclusions drawn from them.

12. Leibniz to Des Bosses¹

[Hanover, 20 September 1706]

Most Reverend Father,

Thank you for communicating the propositions recently condemned by your order. It is not necessary that the list of these be made public, at least not in the near future.^{L1}

L1. DRAFT: future. | Concerning angels, my opinion, which is that of many early doctors of the Church, is that they are endowed with a mind and a body, like human beings, although the perfection of both is much greater in them. And, in fact, I be-

Angeli non sunt Entelechiai corporum, sed ipsi et Entelechias, nempe Mentis, et corpora etiam, meo iudicio habent, quae etiam antiquorum Ecclesiae doctorum non paucorum sententia fuit, a qua praeter necessitatem recessum est. Et quasi non satis esset, veram in perplexitatem accersitae sunt fictitiae. Angeli ergo corpora movent prorsus ut nos facimus nec definitio vestrorum decima nona mihi adversa est. Illud verum est, solum Deum novas vires novasque directiones materiae posse dare, seu motus qui ex ejus pristinis entelechiis non consequantur, idque ad miracula pertinere.^{L2} Nosse velim an apud vos contraria meae opinio de Angelis definita habeatur. Merito rejecti sunt qui angelos omnes creaturam corpoream esse statuerunt sed hoc ad eos non pertinet qui omnes mentes imo Entelechias, incorporeas esse agnoscunt.^{L3}

aratam, quippe qui ipsam materiam creavit: caeterae substantiae si a materia separata essent nulla certa lege connecterentur. A vetere sententia praeter necessitatem recessum est, et quasi non satis esset verarum perplexitatum, fictitiae sunt ascitae. | Angeli ergo. . . .

L2. DRAFT: pertinere | ; et substantiae creatae a materia prorsus secretae meo iudicio non nisi per miracula perpetua locum habere possent. Si quis apud vos sive proprio sive alieno constrictus iudicio angelos prorsus corporis expertes tueri debeat, poterit tamen in aliis compluribus mecum consentire. | Nosse

L3. DRAFT: agnoscunt. | Argumentum Aristotelis quod in vacuo motus futurus esset instantaneus, non satis firmum est, absolute loquendo, nam finge dum corpus in motu est, circumscisa a Deo annihilari, non utique motus ipsius augetur. Fatendum est nihilominus, etsi non ad necessitatem, tamen ad congruentiam pertinere, ut celeritas corporum limites habeat pro medio in quo versantur. Itaque non prorsus de nihilo est Aristotelis consideratio. Imperfectio concipienda est ad analogiam tarditatis, quam major materiae moles accipit ab eodem impellente, exempli causa navis magis onerta in eodem flumine tardius fertur. Itaque vides etsi non activum, sed passivum sit quod imperfectionem constituit, tamen per imperfectionem motus alios oriri, quam prodirent sine ipsa: quod si hoc non satisfacit, difficultatem non satis intelligo. Peccatum originis non est virtus agendi sed virtutis agendi impedimentum, ut ignorantia, vitium: per impedimenta autem prodeunt actiones quae alias non prodirent; uti frigoris exemplo patet. Ego non majorem distantiam concipio inter peccatum originis et vitium quale definivit Aristoteles quam inter habitum innatum et acquisitum. | Nunquam

Angels are not the entelechies of bodies, but in my opinion they themselves have entelechies, namely minds, as well as bodies, which also was the view of a number of early doctors of the Church, from which opinion has diverged more than necessary; and as if this were not enough, fictions have been introduced into genuine perplexity. Angels, therefore, indeed move bodies, just as we do, and I am not opposed to the nineteenth proposition of your order. It is true that God alone can give new forces and new directions to matter, or motions that do not follow from its original entelechies, but this is a question of miracles.^{L2} I should like to know whether within your order there is held a definite opinion concerning angels contrary to mine. Those who have made all angels corporeal creatures are rightly dismissed, but this does not apply to those who recognize that all minds, and indeed entelechies, are incorporeal.^{L3}

lieve that God alone is a substance without matter, for it is he who created matter itself; if other substances were without matter they would not be connected by any determinate law. Opinion has diverged more than necessary from the ancients, and as if there were not enough genuine perplexities, fictions have been adopted. | Angels, therefore

L2. DRAFT: miracles |; and, in my opinion, created substances entirely separated from matter could have a location only through perpetual miracles. If any member of your order, bound by his own opinion or that of another, is required to maintain that angels are entirely without bodies, he nonetheless will be able to agree with me on many other points. | I should

L3. DRAFT: incorporeal. | Strictly speaking, Aristotle's argument that in a void motion would be instantaneous is not solid enough. For suppose that while a body is in motion, God were to annihilate the surrounding bodies; it does not follow at all from this that its motion would be increased. Nonetheless, it must be admitted that the speed of bodies has limits that are proportional to the medium in which they are situated, and although this is not a matter of necessity, it does pertain to harmony. And so Aristotle's thinking is not completely baseless. Imperfection should be conceived on analogy with the slowness that a greater mass of matter receives from the same moving force, e.g., because a boat is more heavily laden it is carried more slowly by the same river. And so you see that although that which constitutes imperfection is not active but passive, still, through the imperfection, different motions arise than would be produced without it: if this is not satisfactory, I do not really understand the problem. Original sin is not a power of acting but an impediment to the power of acting, like ignorance or vice. Through impediments, however, actions arise that in other circumstances would not arise, as the example of cold makes clear. I do not think that there is a greater difference between original sin and vice such as Aristotle defined it than between an innate habit and an acquired one. | Perception is

Difficultatem quam adhuc moves de peccato originis, non satis intelligo. Non est virtus agendi, sed virtutis agendi impedimentum, ut ignorantia, vitium. Per impedimenta autem prodeunt actiones, quae sine ipsis non prodirent, ut frigoris exemplo patet. Nec maiorem distantiam concipio inter peccatum originis et vitium, quam inter habitum innatum et acquisitum. Vitium intelligo quale Aristoteles virtuti morali opponit.

Nunquam versatur perceptio circa objectum in quo non sit aliqua varietas seu multitudo: quod cum Tibi sit exploratissimum miror hic difficultatem repertam.

Miror etiam quod universalia huc afferas. Universale est unum in multis, seu multorum similitudo. Sed cum percipimus exprimuntur multa in uno, nempe ipso percipiente. Vides quam haec distent.

Miror etiam cur dicas animal esse machinam naturae quae habeat Entelechiam perceptione praeditam; nam ex mea definitione patet omnem Entelechiam (primitivam scilicet) perceptione praeditam esse, at ideo animal semper prodire non est cur admittam.

Videris nimium Tibi ipsi diffidere, et solutiones a me petere, quas pro insigni acumine Tuo nullo negotio dare ipse posses.

Et ut saepe dixi si quis Breviarium totius philosophiae conficere tentet, nebulae quae superesse videntur mutua collustratione rerum dissipabuntur.^{L4}

L4. DRAFT: dissipabuntur. | Ajunt Quenellum ex congregatione Oratorii, virum doctum, Arnaldi olim fidum Achatem, quem Mechliniensis Archiepiscopus in carcerem conjecerat, inde erupisse, et nunc in Batavis varia moliri quibus Jansenii et Arnaldi doctrinam resuscitet; irritatum opinor acerbitate, qua cum ipso actum est. Utinam eruditibus inter se certantibus moderatio persuaderi posset! [Ego ut verum fatear nullam Gratiae per se efficaciae necessitatem video; sed tamen vicissim non video quid in doctrina Arnaldi tantopere vestri reprehendant: ut adeo mea sententia utrinque frustra autores paratragedientur.] Ajunt omnes Quenelli schedas Arnaldinasque a multis annis collectas in vestrorum manus devenisse; in quibus putem multa extare quae Historiam sacram et literariam nostri temporis illustrare possent, si a viro moderationis et publici boni amante excerpta inde darentur, quae magis tenderent ad profectum legentis, quam ad gravandos adversarios. Vale et me ama. | Dabam [Leibniz's brackets]

I do not really understand the problem that still bothers you about original sin. It is not a power of acting but an impediment to the power of acting, like ignorance or vice. Through impediments, however, actions arise that would not arise without them, as the example of cold makes clear. And I do not think that there is a greater difference between original sin and vice than between an innate habit and an acquired one. I understand vice as what Aristotle opposes to moral virtue.

Perception is never focused upon an object in which there is not some variety or multitude: since this has been thoroughly examined with you, I am surprised you find a difficulty here.

I am surprised also that you introduce universals at this point. A universal is one thing in many, or a similarity of many things. But when we perceive, many things are expressed in one, namely in the perceiving thing itself. You see how different these are.

I further wonder why you say an animal is a machine of nature, which has an entelechy endowed with perception: for, by my definition, it is obvious that every entelechy (that is, every primary entelechy) is endowed with perception, but I do not grant this because an animal is always in evidence.

You certainly seem to have no confidence in yourself and to be seeking answers from me that you, in virtue of your remarkable acuteness, could easily give yourself.

And as I have often said, if someone will attempt to prepare a summary of the whole of philosophy, obscurities that seem to remain will be removed through the mutual illumination of things.^{L4}

L4. DRAFT: things. | It is said that Quesnel of the congregation of the Oratory, a learned man, once the faithful Achates of Arnauld, who was imprisoned by the archbishop of Malines, has escaped and is now in Holland endeavoring in various ways to revive the doctrine of Jansen and Arnauld; I believe he has become embittered by the harshness with which he has been treated. If only the learned could be persuaded to exercise moderation in their battles with each other! [For my own part, I must admit that I see no necessity for a grace efficacious in itself, but at the same time I also do not see what your order finds so reprehensible in Arnauld's doctrine, and so in my opinion authors on both sides are acting out a pointless tragedy.] It is said that all of Quesnel's and Arnauld's papers, gathered over many years, have come into the hands of your order. Among these, I believe, are many that could illuminate the religious and literary history of our time, provided that a man who loves moderation and the public good selected those that aim more at the advancement of the reader than at the oppression of opponents. Farewell and think fondly of me. | From Hanover [Leibniz's brackets]

Ex Batavis ad me scriptum est, ibi agere Dn. Quenellum ex congregatione Oratorii, elapsum ex carcere in quem conjecerat eum Episcopus Mechliniensis, variaque moliri scriptis, ut Arnaldi suamque existimationem sententia Archiepiscopi gravatam tueatur. Ajunt scripta ejus pleraque, omne commercium literarum, quod Arnaldo et ipsi Quenello a multis annis cum aliis intercessit, in vestrorum manus devenisse. Unde ego selecta edi optarem, sed magis quae ad utilitatem publicam, quam quae ad parandos adversarios pertinerent. Vale. Dabam Hanoverae 20 Septembr. 1706.

Deditissimus

G. G. Leibnitius

P.S. Argumentum Aristotelis contra Vacuum, quod in Vacuo motus futurus esset instantaneus, non satis firmum est absolute loquendo: nam finge dum corpus in motu est, circumscisa a Deo annihilari, non utique inde motus ipsius augeretur. Fatendum est nihilominus, etsi non ad necessitatem, tamen ad congruentiam pertinere, ut celeritas corporum limites habeat pro medio in quo versantur. Itaque non prorsus de nihilo est Aristotelis consideratio. Veniam peto perturbatae scriptionis.

Des Bosses to Leibniz

Illustrissime Domine

P[ax] C[hristi]

Plurimum semper ex litteris tuis proficio, sive me doces, sive amanter objurgas. Quod in dubitationibus alioqui facilibus haeream, noli mirari: nosti quam vim habeant hausta ex Scholis praejudicia, quibus fit ut ea quae scimus vel scire saltem possemus, saepe nesciamus.

Universale cum multorum in uno expressione confundendi ansam mihi dedit familiaris Scholis nostris partitio qua universale in objectivum et formale seu mentale dividimus, quod postremum in ipsa perceptione confusa multorum similium a plurimis constitui solet. Hujusmodi perceptionem Entelechiis a te tribui non sane rebar, sed solum acutissimam tuam definitionem ad captum meum elucidari cupiebam, ut discrimen animam rationalem inter et caeteras Entelechias appareret.

It has been reported to me from Holland that Mr. Quesnel, of the congregation of the Oratory, is living there, having escaped the prison in which he had been placed by the archbishop of Malines, and that he has made various attempts in writings to defend Arnauld's and his own reputation, which has been hurt by the archbishop's judgment.² It is said that many of his writings, including all the letters that Arnauld and Quesnel himself exchanged with others over many years, have come into the hands of your order. I should like to see selections from these published, but more those that contribute to the common good than to the arming of enemies.³

Farewell. From Hanover, 20 September 1706.

Most faithfully,

G. W. Leibniz

P.S.⁴ Strictly speaking, Aristotle's argument against the void, namely that in a void motion would be instantaneous, is not solid enough. For suppose that while a body is in motion, God were to annihilate the surrounding bodies; it does not follow at all from this that its motion would be increased. Nonetheless, it must be admitted that the speed of bodies has limits that are proportional to the medium in which they are situated, and although this is not a matter of necessity, it does pertain to harmony. And so Aristotle's thinking is not completely baseless. Please forgive the shakiness of my writing.

13. Des Bosses to Leibniz¹

[Hildesheim, 29 September 1706]

Most Distinguished Sir,

The Peace of Christ,

I always profit greatly from your letters, whether you teach me or reprove me in a friendly way. Do not be surprised that I get stuck on questions that are easy for everyone else. You know the force that is exerted by preconceptions derived from the schools, whereby it happens that those things we know or at least could know, we often do not know.

I was given the occasion for confusing universals with the expression of many things in one by the familiar distinction in our schools, in which we divide universals into the objective and the formal or mental, the latter of which many are accustomed to define as the confused perception of many similar things. I was not really thinking that you attributed this sort of perception to entelechies but only desired that your most insightful definition be elucidated for me, so that the difference between a rational soul and other entelechies might be clear.

Utrum Angelos esse incorporeos definitum apud nos habeatur, malo ex Patre Martino de Esparsa, magni nominis Theologo Romano, quam ex me intelligas. Ex eo, si forte ad manum autor ille non esset, ea quae in adjecta schedula invenies, ad verbum descripsi. Rationes philosophicas, quas pro sententia affirmativa affert perlustravi, quae, meo iudicio, si quid evincunt, hoc duntaxat probant, esse angelos quosdam incorporeos; non vero, omnes, videnturque posse omnes eae rationes cum doctrina tua conciliari, si modo in subsidium vocare libuerit S. Thomas ejusque sequaces qui Angelos *ministrantes* distinguunt ab *assistentibus*, atque ministrantibus quidam actionem physicam in corpora tribuunt, assistentibus vero negant. De quo videri potest S. Thomas prima parte qu. 112 articulis 2. 3 et 4.

Brevarium Philosophicum, cujus conficiendi jam dudum autor hortatorque es, lente procedit quidem, ob temporis penuriam: procedit tamen, et quantum quotidianae lectiones sinunt. Quidquid occurrit quod ad scopum illum faciat, colligo digeroque indices, atque verissime dictum experior nebulas, quae restant, mutua rerum collustratione dissipari; sed multo magis colloquio tuo, si eo frui interdum liceret dissipatum iri confiderem, nam fatale tibi est novam rebus istis lucem afferre.

De Quesnelli et scriptorum ejus sorte audieram jam ante, an vero scripta ista in nostrorum sint potestate, non intellexi. Missus est nobis abhinc semestri liber sat magnus jussu Archiepiscopi Mechliniensis in lucem editus cum titulo: *Causa Quesnelliana* in quo passim extant fragmenta ex interceptis Quesnelli scriptis excerpta, sed quia totus ad demonstrandum Archiepiscopalis in Quesnellum actionis aequitatem conscriptus est, dubito, num ejusmodi sit qualem optares. Si tamen illius videndi cupidus es, faxo ut accipias, quamprimum suffraganeus noster, cui mutuum dedi, ab ubiis ubi nunc est, fuerit reversus. Quod superest vale, Illustrissime Domine, meque solita benevolentia proseguere. Dabam Hildesiae 29 Septembris 1706.

Illustrissimae Dominationis tuae

Humillimus et obedientissimus Servus in Xto

Bartholomaeus Des Bosses SJ

As to whether we hold angels to be defined as incorporeal, I prefer that you learn from Father Martín de Esparza, a renowned theologian in Rome, rather than from me. In case you do not have this author at hand, I have copied out the things you will find in the enclosed pages.² I have examined the philosophical reasons he gives on behalf of the affirmative opinion, and these, in my view, if they succeed in proving anything, prove at least this: that some angels are incorporeal but not all, and it seems that all these reasons can be reconciled with your doctrine, provided only that it is permissible to call on the help of St. Thomas and his followers, who distinguish “ministering” angels from “assisting” angels, and ascribe a certain physical action on bodies to ministering angels but deny it to assisting angels. Concerning this, you may see St. Thomas, *Summa theologiae*, part I, question 112, articles 2, 3, and 4.

The philosophical summary, whose completion you have long promoted and encouraged, definitely proceeds slowly on account of a lack of time, but it proceeds nonetheless as much as daily lectures allow. I collect whatever turns up that may be useful for this purpose and draw up lists, but in all honesty I find obscurities that remain to be clarified by the mutual illumination of things. I am confident, however, that these are going to be clarified much more by conversation with you, if it should be enjoyed sometimes, for you are destined to bring new light to these matters.

I had heard already about the fate of Quesnel and his writings; I have not learned whether those writings are actually in our possession. By the order of the archbishop of Malines there was sent to us six months ago a rather large book that has been published under the title *The Quesnel Case*, in which are found throughout fragments excerpted from Quesnel’s seized writings.³ But since the whole book was written to demonstrate the fairness of the archbishop’s action against Quesnel, I doubt whether it is the sort of thing you are looking for. Nevertheless, if you are eager to see it, I shall make sure you receive it as soon as our canon, to whom I lent it, has returned from where he now is. For the rest, farewell, most distinguished Sir, and honor me with your usual goodwill. From Hildesheim, 29 September 1706.

Your Excellency’s most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.

Leibniz to Des Bosses

Admodum Reverende Pater

Rogo ne quae a me excitandi animi gratia dicta sunt, in sequiorem partem accipias.

Gratias ago pro loco Patris Martini Esparsae exscripto. Ejus quaedam olim legere memini; et visus est peracutus.

Sententia de omnimoda sejunctione Angelorum a corporibus non rationem, non scripturam, sed solam opinionem communem scholarum pro fundamento habet. Concilium Lateranen se loqui non definitive sed discursive ex recepto tunc sensu, verba satis ostendunt. Ut aliqui Angeli quos cum Thoma assistentes vocas, a corporibus sejuncti sint prorsus, meae ni fallor demonstrationes non admittunt, et facile id fateor de omnibus, quod de aliquibus ferri posset.

Eum tamen corporis usum Angelis tribui posse arbitror, ut non inepte dicantur formae assistentes potius quam inhaerentes, non quod Entelechiarum officium non faciant, sed quod corpori non sint affixe. Arbitror enim (cum naturaliter possibile sit, et ad perfectionem Universi faciat) esse Entelechias, quae facillime mutant corpus, seu de corpore in corpus transeant; non momento quidem, (nihil enim sic fit naturaliter) sed brevi tamen tempore, licet per gradus. Uti pars quam retinent servit mutandae parti quam deponunt, etsi etiam ipsa deinde pro re nata mutetur, uti nos manus ope possumus pedem mutare, et ligneum carneo substituere. Imo ope unius manus possemus mutare alteram manum, et ope novae manus rursus priorem, si novam satis nobis unire liceret. Ita semper aget angelus per corpora, semperque locum habebit harmonia praestabilita, seu ut quae vult angelus fiant ex ipsa corporum lege: fere ut Suaresium vestrum dicere memini ex quorundam sententia res ita praeordinatas esse, ut voluntatibus precibusque beatorum sponte satisfaciant.

Assistentes igitur Formas voco quae pro arbitrio corpus sumunt atque deponunt et quod habent transformant; inhaerentes atque animantes quae tale arbitrium non habent, etsi hoc arbitrium suis limitibus coerceatur, ut cuncta naturali ordine procedant. Solius enim Dei est quidvis facere ex quovis nuda voluntate. Et priores putem a corpore secretas dici posse,

14. Leibniz to Des Bosses¹

[Hanover, 4 October 1706]

Most Reverend Father,

I beg you not to be offended by things I have said for the sake of stimulating your mind.

Thank you for the passage copied from Father Martín de Esparza; I remember reading something of his once, and it seemed very penetrating.

The doctrine of the absolute separation of angels from bodies has for its foundation neither reason nor scripture but only the common opinion of the schools. The words of the Lateran Council show sufficiently that it did not speak definitively but only discursively, on the basis of what was then the received meaning.² Unless I am mistaken, my demonstrations do not allow that some angels, which you with Thomas call “assisting,” may be completely separated from bodies, and I readily grant about all whatever could be supported about some.

Still, I believe this use of the body can be ascribed to angels, so it is not wrong to call them assisting rather than inhering forms, not because they do not perform the function of entelechies, but because they are not attached to a body. For I believe (since it is naturally possible and contributes to the perfection of the universe) that there are entelechies that change bodies very easily, or pass from body to body, not in a moment of course (for nothing happens naturally in that way) but nonetheless in a brief time, though through degrees. Just as the part they retain takes care of the part to be changed, which they give up, although the former itself is also then transformed in the process, so we can change a foot with the help of a hand and substitute wood for flesh. Indeed, with the help of one hand we could change the other, and with the help of the new hand in turn we could change the first, provided that the new hand were sufficiently united to us. Thus, an angel will always act through bodies and will always have a place in the preestablished harmony, with the result that whatever the angel wants happens through the very law of bodies, much as I remember your Suárez saying, that according to the opinion of some, things are preordained in such a way that by themselves they satisfy the wishes and prayers of the blessed.³

I call those forms assisting, therefore, that take on and give up bodies at will and transform whatever they possess; inhering and animating, those forms that do not have such a will, though it is contained within their capacities, so that they proceed in accordance with the natural order as a whole. For it belongs to God alone to do whatever he pleases for whatever reason, by will alone. And I believe the former can be said to be separated from a body, the latter attached to a body. Nevertheless, it must be ac-

posteriores corpori affixas. Fatendum tamen est ambas corpori unitas esse ut rationem habeant Entelechiaie. Et hoc videtur esse ad mentem, Augustini lib. 21 de Civitate Dei c. 10. a Thoma citatam qu. 16. de Malo artic. 1: *posse scilicet daemones (vel Angelos) dici spiritus, quod corpora sibi magis subdita habeant*. Itaque neque intelligentiis istis *Animarum*, neque Angelis ipsis *Animalium* appellationem tribuimus.

Caeterum corporis mutatio nihil habet quod non receptis consentiat; nam et nos corpus mutamus, ut fortasse senes nihil materiae infantis retineamus: tantum hoc interest, quod neque subito neque pro arbitrio corpus exuimus. Quod superest vale et fave. Dabam Hanoverae 4 Octobr. 1706.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Grata aliquando erit Causa Quesnelliana, quaeque alia hujus modi ad Historiam literariam pertinent.

Des Bosses to Leibniz

Illustrissime Domine, Patrone Colendissime

P[ax] C[hristi]

Dierum aliquot excursionem impeditus sum, quominus gratissimis tuis litteris citius responderem. Nuperam excitatiunculam tuam adeo non tuli moleste, ut vel corripui a te malim quam ab alio laudari.

Omnimodam Angelorum sejunctionem a corporibus ne Esparsa quidem ipse, quem nuper laudavi, probaverit. Nam in illo ipso quem citavi tractatu, quaestione 5. Articulo 5. sic loquitur: *Unusquisque Angelus, saltem tertiae Hierarchiae* (et idem dici potest de duabus reliquis) *refertur ad determinatum corpus, aut ad determinatam corporum collectionem, atque cum illo aut illis peculiariter connectitur in ratione motoris aut directoris: habetque in se intrinsece aliquid, per quod a Deo est permanenter destinatus ad talem determinate corporis vel corporum curam et regimen*. Et post pauca: *Sicut animae rationales referuntur singulae ad singula corpora tanquam eorum formae; ita singuli ex praedictis Angelis referuntur ad singula corpora vel corporum collectiones tanquam motores aut directores eorum*. Huiusque Esparsa. Ubi vides ipsum Angelis

knowledge that both are united to a body, so that they count as entelchies. And this seems to be the view of Augustine in book XXI, chapter 10, of *The City of God*, cited by Aquinas in *On Evil*, question 16, article 1: "Demons (or angels) certainly can be called spirits, for they have bodies that are subordinated more to them."⁴ Thus, we may ascribe neither the name "souls" to these intelligences, nor that of "animals" to angels themselves.⁵

Be that as it may, the change of a body involves nothing that does not agree with received opinions, for we too change our body, so that when we are old we perhaps retain none of the matter of the child; the only difference is that we do not suddenly or voluntarily discard the body.

For the rest, farewell and think kindly of me. From Hanover, 4 October 1706.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I shall be grateful at some point for *The Quesnel Case* and any other things of this sort that pertain to the history of letters.

15. Des Bosses to Leibniz¹

[Hildesheim, 14 October 1706]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

Several days of traveling have prevented me from responding sooner to your most welcome letter. So far am I from feeling hurt by your recent gentle prodding that I should prefer even to be rebuked by you than to be praised by another.

Not even Esparza himself, whom I recently praised, approved of the absolute separation of angels from bodies; for in question 5, article 5, of the very work from which I quoted, he says the following: "Any angel, at least of the third hierarchy" (and the same can be said of the other two), "is related to a determinate body, or to a determinate collection of bodies, and is specially connected to it or them as a mover or director; and it has intrinsically in itself something through which it has been permanently destined by God for that sort of determinate control and command of a body or bodies." And a little later: "Just as individual rational souls are related to individual bodies as their forms, so individuals among the aforementioned angels are related to individual bodies or collections of bodies as their movers or directors."² So much for Esparza, who you see ascribes to an-

tribuere officium Entelechiaae analogum. Et hanc doctrinam tradit hoc loco Esparsa, ut ostendat Angelos ab invicem solo numero differre posse, quamvis individuatio, vel numerica substantiarum diversitas per respectum ad materiam desumenda sit, juxta veterum Peripateticorum sententiam.

Itaque totum postremae epistolae tuae ratiocinium bellissime procedere reor etiam ad mentem hujus auctoris, si modo per Entelechiaae munus quod Angelis attribuis, ejusmodi vim motricem corporum intelligas, ob quam Angelica tamen intelligentia dicenda non sit incompleta substantia, nec ex intelligentia Angelica et corpore cui conjungitur unum per se suppositum fieri dicatur, uti fit ex anima humana et corpore. Hanc enim incompletionem non facile admittent Theologi nostri. Sit ergo sane, Angelicas intelligentias inter et corpora ab ipsis mota, unio vera ac intima illa quidem sed accidentaliter, non faciens ex illis iunctis unum per se ens, cujusmodi est Verbum Divinum unitum humanitati, ut altero Exemplo, eoque Theologico utar. Id si admiseris, uti stante etiam discrimine quod inter *Animalia* et *Angelos*, *Animam* hominis inter et *intelligentiam* Angelicam statuis, admittere posse videris, nihil video in quo sententia tua a probata et recepta in scholis doctrina recedat. Caeterum rationes quae suadent substantias aliquas creatas penitus a corporibus separatas concedendas esse, hae fere sunt, quas subdo ut demonstrationes tuas in contrarium eliciam.

1. Ad perfectionem universi spectat existere hujusmodi substantias, si quidem possibiles sunt. At possibiles esse quid vetat? An non Deus ipse talis substantia est? Neque enim, opinor Deum etiam esse Entelechiam dices. Quod esset Deum facere animam mundi, eamque necessario affixam corporibus omnibus extantibus, cum Deus necessario agat in illa quamdiu existunt. Quidni ergo Deus communicare possit cum creatura aliqua quantumvis sejuncta a corpore, virtutem quam ipse habet movendi corpora? Nec dicas potestatem hanc Deo ut spiritui infinito convenire, nam non satis apparet, quid hic faciat infinitas, et hinc colligo non repugnare spiritui puro qua purus est, virtutem movendi corpora, alioquin nec spiritui puro infinito id conveniret (per *purum* intelligo spiritum qui simul Entelechia non sit). Sane si ad agendum in corpus oporteret esse corpus, ne spiritus quidem infinitus in corpus agere posset, ergo pariter si ad

gels a function analogous to that of entelechies. And Esparza defends this view in the passage, with the result that he shows that angels can differ from one another in number alone, although the individuation or numerical difference of substances must be drawn from a relation to matter, in accordance with the opinion of the ancient Peripatetics.

Thus, I believe the entire argument of your last letter proceeds most beautifully, even given the view of this author, provided that by the function of an entelechy that you ascribe to angels you understand this sort of moving force of bodies. Nevertheless, an angelic intelligence should not for that reason be called an incomplete substance, nor may it be said that a complete substance with a *per se* unity is made from an angelic intelligence and the body to which it is joined, as happens with a human soul and body, for our theologians do not readily admit this incompleteness. Thus, there may indeed exist that true and intimate union between angelic intelligences and the bodies moved by them, but it is an accidental union that does not make from the united things a being with a *per se* unity, in the way that the divine word is united to humanity, to take another example from this theologian. If you would accept this, as you seem able to do given the firm distinction you also establish between “animals” and “angels” and between a human “soul” and an angelic “intelligence,” then I see no way in which your view departs from the teaching approved by and accepted in the schools. For the rest, the arguments suggesting that it must be conceded that some created substances are completely separated from bodies are just arguments that I offer so that I may elicit your proofs to the contrary.

1. It tends to the perfection of the universe for substances of this sort to exist, if indeed they are possible. But what prevents them from being possible? Or is God himself not such a substance? For I do not suppose you will say that God, too, is an entelechy. That would be to make God the soul of the world, one that is attached necessarily to all existing bodies, since God necessarily acts on them as long as they exist. Why, then, could not God share with some creature, however separated from a body, the power that he himself has of moving bodies? You do not say that this power belongs to God as an infinite spirit, for it is not sufficiently clear what the infinity would be doing here, and from this I infer that the power of moving bodies is not incompatible with a pure spirit insofar as it is pure, for otherwise it would not belong to an infinite pure spirit (by a “pure” spirit I mean one that is not at the same time an entelechy). Of course, if to act on a body it is necessary to be a body, then not even an infinite spirit could act on a

agendum in corpus oporteret non esse spiritum purum, nec spiritus purus infinitus tali virtute gaudebit.

2. Admisso etiam spiritum creatum qui Entelechia munus non habeat, agere in corpora non posse. Cur impossibilis erit spiritus creatus, qui Entelechia non sit, nec adeo movere corpora possit? Certe S. Thomas aliquibus Angelorum ordinibus omne circa creaturam corpoream ministerium exterius et sensibile sive omnem in corpora actionem abjudicat, non solum de lege communi sed etiam extraordinaria hosque ipsos, ut sic loquar, inertes Angelos *assistantes* vocat, distinguitque a *ministrantibus* ad quos duntaxat pertineat circa corporeum ministerium occupari. Juvat inspicere hunc doctorem citata parte prima qu. 112 articulis 1. 2. 3. et 4. ut in qua significatione vocem *assistere* in priori epistola usurpaveram agnoscas. Tu de Angelis *corpori assistantibus* loqueris; ego de Angelis *Deo assistantibus* cum S. Thoma loquebar.

Quod in fine insinuas *nos corpus mutare, ut fortasse senes nihil materiae infantilis habeamus*, scio quidem plurimorum esse philosophorum sententiam. Sed si sit etiam tua, profecto mentem tuam non recte explicavit Baylius in Dictionario Historico-Critico. Artic. *Rorarius* littera I. ubi ait: *L'hypothese de M. de L. nous porte à croire. . . 2^o que ces ames subsistent toujours depuis ce temps là unies inseparablement au premier corps organisé dans lequel Dieu les a logées. Cela nous epargne la Metempsychose, qui sans cela seroit un asyle où il faudroit necessairement se sauver.* Nam quomodo verum erit animas semper unitas primis suis corporibus subsistere, nisi dicatur aliquid materiae primigeniae semper adhaerere Entelechiis? Si bene memini cum in superioribus litteris aliquid ea de re movissem, respondisti: nullam Entelechiam esse certae parti materiae, nempe secundae, affixam; secus vero si sermo sit de materia prima, talem enim materiam, id est passionis principium etc. perstare suaeque Entelechiae adhaerere. Porro si materiam hujusmodi primigeniam, Entelechiae adhaerentem, quam caeteris formis concedis, Angelicis intelligentiis denegas, optime ni fallor vel ex hoc capite dici potest Spiritus Angelicos non *formas* esse sed *motores* duntaxat corporum in sensu quo voces has peripatetici usurpant.

Duo restant in praesenti materia de quibus mentem tuam intelligere cupio.

1. Utrum censeas animae etiam rationali post mortem hominis aliquam materiam adhaerere comitem individuum usque ad resurrectionem?

body; equally, therefore, if to act on a body it is necessary not to be a pure spirit, then an infinite pure spirit will not enjoy such a power.

2. Even if we accept that a created spirit that does not have the function of an entelechy cannot act on bodies, why will it be impossible that a created spirit that is not an entelechy thus cannot move bodies? Certainly St. Thomas denies to some orders of angels any external and sensible ministry with respect to a corporeal creature, or any action on bodies, not only concerning the ordinary law but also the extraordinary, and these, so to speak, inert angels he calls “assisting” and distinguishes from “ministering” angels, to whom it belongs, strictly speaking, to be occupied in respect to a corporeal ministry. It helps to consider what this doctor says in Part I, question 112, articles 1, 2, 3, and 4, to understand the sense in which I made use of the word “assist” in my earlier letter. You may speak of angels “assisting bodies”; I with St. Thomas spoke of angels “assisting God.”³

What you add at the end, that “we change our body, so that when we are old we perhaps retain nothing of the matter of the child,” I know indeed to be the opinion of many philosophers. But if it is yours as well, Bayle did not really explain your view correctly in note H⁴ of the article “Rorarius” in the *Historical and Critical Dictionary*, where he says: “The hypothesis of Mr. Leibniz leads us to believe . . . secondly, that these souls continue to exist always from that time on, inseparably united to the first organized body in which God placed them. This saves us from metempsychosis, which otherwise would be a refuge from which it would be necessary to save ourselves.” For how will it be true that souls always continue to exist united to their first bodies, unless we say that some original matter always adheres to entelechies? If I remember correctly, when I raised something about this topic in an earlier letter, you replied that no entelechy is attached to a specific part of matter, that is, secondary matter, but that the opposite is true if the question concerns primary matter, for such matter, that is, the principle of passion, etc., persists and adheres to its entelechy. Furthermore, if you deny to angelic intelligences original matter of this sort that adheres to the entelechy—matter that you concede to other forms—then unless I am completely mistaken it could be said even on these grounds that angelic spirits are not the “forms” but merely the “movers” of bodies, in the sense in which the Peripatetics use these words.

There remain two points concerning the present topic about which I desire to learn your view:

1. Do you think that some matter adheres even to a rational soul after the death of a human being as an inseparable companion until resurrection?

2. Cum omnis Entelechia sit spiritus, cur igitur etiam omnis Entelechia non erit rationis particeps, intellectu et voluntate praedita, facta ad imaginem Dei, capax beatitudinis sempiternae, perinde ac nostrae? Cum ejusmodi attributa a spiritualitate sive immaterialitate tanquam a radice adaequata oriri passim censeantur?

Causam Quesnellianam ubi ab eo cui commodavi recepero, mittam simul cum Gerberonianam, alterius, ut nosti, factionis istius Atlantis. Habeo insuper *Historiam quinque propositionum Jansenii* aliquot abhinc annis accuratissime, et (quantum fieri potuit ab eo qui Jansenii doctrinam non probat) sine partium studio conscriptam a Dumasio, Doctore Sorbonico. Hanc si forte nondum vidisti prima quoque occasione lubentissime communicabo. Quod superest vale illustrissime Domine. Dabam Hildesiae 14 Octobris 1706.

Illustrissimae Dominationis tuae

Humillimus et obedientissimus servus in Xto

Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Admodum Reverende Pater

Valde placet Esparsae vestri locus, et pergratum erit, quoties indicabis auctoritates mihi faventes. Neque ego illud peripateticorum dogma sperno, qui relationem ad determinatam materiam (etsi pro tempore aliam atque aliam) ad numericam substantiarum distinctionem requirunt. De Deo res secus habet, qui sufficiens sibi causaque est materiae et aliorum omnium. Itaque non est anima Mundi, sed autor. Naturale vero est creaturis materiam habere, neque aliter possibiles sunt, nisi Deus per miraculum suppleat materiae munus. At quae non nisi per miraculum praestari possunt, non sunt regulariter necessaria ad perfectionem Universi. Spiritus infinitus in corpora agit creando et conservando, quod quaedam creandi continuatio est. Hoc finito spiritui communicari non potest.

Cum de Assistantibus Formis locutus sum, non ad Thomae distinctionem quam memoras respexi inter Angelos Deo assistentes et ministrantes (quanquam scriptura omnes appellet ministratores spiritus) sed ad peripateticas phrases. Deo assistentes intelligentias, quae nihil aliud agant, neque Deo sint administratae convenire rerum ordini non puto. Has

2. Since every entelechy is a spirit, why then will every entelechy not partake of reason, be endowed with intellect and will, be made in the image of God, be capable of everlasting blessedness, just as ours is? For generally attributes of this kind are held to arise from spirituality or immateriality, as if from an adequate foundation.

When I get back *The Quesnel Case* from the person to whom I lent it, I shall send it, along with the writings of Gerberon, another, as you know, of that faction of Atlantis.⁵ I have, in addition, the *History of Five Propositions of Jansen*, compiled most accurately and impartially (as far as could be done by one who does not approve of Jansen's teachings) some years ago by Dumas, a doctor of the Sorbonne.⁶ If perhaps you have not yet seen it, I shall gladly pass it on also at the first opportunity.

For the rest, farewell, most distinguished Sir. From Hildesheim, 14 October 1706.

Your Excellency's most humble and obedient servant in Christ,
Bartholomew Des Bosses, S.J.

16. Leibniz to Des Bosses¹

[Hanover, 16 October 1706]

Most Reverend Father,

The passage from your Father Esparza is very pleasing.² I should be grateful if, whenever possible, you indicate authorities favoring my views. I do not reject the doctrine of the Peripatetics, who require a relation to determinate matter (although different matter at different times) for the numerical distinction of substances. This will not hold in the case of God, who is self-sufficient and the cause of matter and of all other things; thus he is not the soul of the world but the author. But it is natural for created things to have matter,³ and they are not possible in any other way, unless God fulfills the function of matter through a miracle. But those things that can occur only through a miracle are not as a rule necessary for the perfection of the universe. Infinite spirit acts on bodies by creating and conserving them, which, in a way, is a continuation of creation; this cannot be shared with finite spirits.

When I spoke of assisting forms, I was thinking not about the distinction of Aquinas that you mention between angels assisting and ministering to God (although scripture calls all spirits "ministers") but about Peripatetic dicta. I do not believe that intelligences assisting God, which do nothing else and are not ministers of God, are in agreement with the order

enim remove a corporibus et loco, est remove ab universali connexion et ordine mundi, quem faciunt relationes ad tempus et locum.

Quod ad quaestionem attinet, utrum Entelechia materiam mutet, distinguo, ut me jam fecisse scribis: Entelechia Corpus suum organicum mutat seu materiam secundam, at suam propriam materiam primam non mutat. Dn. Bayle mentem meam in his satis percepisse non videtur. Materia prima cuivis Entelechiai est essentialis, neque unquam ab ea separatur cum eam compleat et sit ipsa Potentia passiva totius substantiae completae; neque enim materia prima in mole seu impenetrabilitate et extensione consistit. Materia vero secunda qualis corpus organicum constituit, resultat ex innumeris substantiis completis quarum quaevis suam habet Entelechiam, et suam materiam primam, sed harum substantiarum nulla nostrae perpetuo affixa est. Materia itaque prima cujuslibet substantiae in corpore ejus organico existentis, alterius substantiae materiam primam involvit, non ut partem essentialem, sed ut requisitum immediatum, at pro tempore tantum, cum unum alteri succedat. Etsi ergo Deus per potentiam absolutam possit substantiam privare Materia secunda, non tamen potest eam privare Materia prima, nam faceret inde Actum purum, qualis ipse est solus. An vero necesse sit Angelum esse formam informantem seu Animam corporis organici quasi ei personaliter unitam, alia quaestio est, et certo sensu in praecedente Epistola exposito negari potest. Vides hinc etiam tolli substantias incompletas, monstrum in vera philosophia.

De statu Animae humanae separatae nihil certi definire possum: cum praeter regnum naturae, hic influat regnum gratiae. Cur autem certa materia secunda ipsi perpetuo affigatur usque ad resurrectionem; causam nullam video.

Non memini dicere quod omnis Entelechia sit spiritus, malimque hanc appellationem servare rationalibus Entelechiis. Quod non omnis Entelechia rationis sit capax, jam dudum dixi, cum non omnis sit sui conscia seu reflexivo actu praedita. Hoc ni fallor peripatetici (Thomistae inprimis qui indivisibiles agnoscunt etiam brutorum animas) jam observarunt. Hinc brutorum animae personam non habent, et proinde solus ex notis nobis animalibus homo habet personae immortalitatem, quippe quae in conscientiae sui conservatione consistit, capacemque poenae et praemii reddit.

Grata erit eorum quae sperare me jubes scriptorum communicatio, sed

of things. For to remove them from bodies and place is to remove them from the universal connection and order of the world, which relations with respect to time and place produce.

Concerning the question whether an entelechy may change matter, I draw the following distinction, as you write I have already done: an entelechy changes its organic body or secondary matter, but it does not change its own primary matter. Mr. Bayle does not seem to have understood my opinion about this well enough. Primary matter is essential to any entelechy and is never separated from it, since it completes it and is itself the passive power of the entire complete substance; for primary matter does not consist in bulk, that is, impenetrability, and extension.⁴ Secondary matter, however, such as constitutes an organic body, is a result of innumerable complete substances, each of which has its own entelechy and its own primary matter, but none of these substances is perpetually attached to us. Thus the primary matter of any substance involves the primary matter of another substance existing in its organic body, not as an essential part, but as an immediate requisite, and for a time only, since one takes the place of another. Therefore, although God through his absolute power could deprive a substance⁵ of secondary matter, he nevertheless cannot deprive it of primary matter, for from this he would produce pure act such as he himself alone is. Whether it is truly necessary that an angel be an informing form or the soul of an organic body, as if united to it personally, is another question, and in a certain sense explained in the preceding letter it can be denied. You see from this also that incomplete substances are abolished; they are a monstrosity in the true philosophy.⁶

I can determine nothing certain regarding the state of the separated human soul, since the kingdom of grace, in addition to the kingdom of nature, plays a role here. Still, I see no reason why some particular secondary matter should be perpetually attached to it until the resurrection.

I do not remember saying that every entelechy is a spirit, and I should prefer to reserve this designation for rational entelechies. Of course, I have already said earlier that not every entelechy is capable of reason, since not all of them are endowed with consciousness of themselves or actual reflection. Unless I am mistaken, the Peripatetics already noted this (especially the Thomists, who recognize indivisible souls even in beasts). It follows that the souls of beasts are not persons, and consequently, of the animals known to us, man alone has personal immortality, which of course consists in the preservation of consciousness of oneself and which renders one capable of punishment and reward.

I shall welcome the communication of those writings you have told me

ubi rediero domum; nam intra unam alteramve septimanam Guelfebytum excurram. Gratum etiam erit, si subinde me doceas, quae in vestro ordine aut alias in re literaria praesertim sacra philosophicaque gerantur. Et utile esset discere quae Romae decernantur in congregationibus, velut Rituum Inquisitionis, Indicis, etc. Nam talia a me minime spernuntur.

Quid si Tu quoque Guelfebytum excurras paullisper cum illic ero? Erit ibi fortasse aliquis ordinis vestri, ob causam quam non ignorabis. Hujus grata mihi forte et Tibi notitia erit; sed Tua imprimis grata erit Serenissimo Duci, nec Tibi negligenda. Itaque de hac excursiuncula sententiam Tuam quam primum exspecto. Caeterum significabo cum illuc ibo. Spero id facere septimana quam cras inchoamus. Vale et me ama. Dabam Hanoverae 16 Octobr. 1706.

Deditissimus

G. G. Leibnitius

Leibniz to Des Bosses

Plurimum Reverende Pater

Fautor & Amice honoratissime

Paulo serius gratissimae Tuae ad me sunt perlatae. Discussio Historiae de auxiliis non spernenda erit, modo abstinence utrinque odiosis, quae non aedificant sed destruunt.

De infallibilitate Ecclesiae in rebus facti, doce me quaeso aliquando. Ego enim fateor me semper Bellarmini et aliorum sententiam magis probasse, qui ipsa Generalia Concilia in eo genere labi posse putant. Et nollem commodis praesentibus affectibusque doctrinas imposterum poenitendas dari. Imponere omnibus, ut in rebus hujusmodi de interiore assensu jurare debeant, iniquum arbitror, cum ille hic non sit in potestate, nec adsint quae sufficiant ad persuadendum. Ecclesiae autoritas, (quam ego si justis limitibus contineatur venerandam arbitror) perinde ac principum, non augetur abusu et prolationibus nimis, sed tandem etiam intra aequum periclitatur, quod experientia plus semel docuit. Utinam praeclari homines et in vestro ordine, et alibi passim, vel ponerent vel coercerent

to expect, but it will be after I have returned home, for I shall be making a trip to Wolfenbüttel within a week or two. I shall be grateful also if you would let me know then of any recent events in your order or elsewhere in the learned world, especially in theology and philosophy, and it would be useful to learn what decrees have been passed in Rome in the congregations on rites, the Inquisition, the Index, etc. For I take such matters most seriously.

What do you say to a short excursion to Wolfenbüttel while I am there? There perhaps will be someone from your order there, so you will not be without company; it will be very pleasing for both of us to make his acquaintance. But your presence will be especially appreciated by his serene highness, the duke,⁷ and this is something you should not overlook. Let me know your decision about this little trip as soon as possible.⁸ Otherwise I shall indicate when I am setting out. I hope to make it during the coming week. Farewell and think fondly of me. From Hanover, 16 October 1706.

Most faithfully,
G. W. Leibniz

17. Leibniz to Des Bosses¹

[Berlin, 5 February 1707]

Most Reverend Father, Most Honored Supporter and Friend,

Your most welcome letter was a little late in reaching me. Discussion of the *History of the Controversies concerning the Aids of Divine Grace* should not be rejected, provided that both sides abstain from offensive remarks, which are destructive rather than constructive.²

I ask that you teach me sometime about the infallibility of the Church in matters of fact, for I admit that I have always favored the opinion of Belarmine³ and others, who believe that even general councils can be mistaken in such matters, and I should not want to offer to present interests and emotions doctrines for which one would have to suffer in the future. Moreover, I believe it is unfair to require that each person vow obedience on the basis of an internal assent in matters of this sort, for in this case it does not lie within one's power and there are no arguments sufficient to persuade one. The authority of the Church (which in my view ought to be respected provided it is held within just limits), just like that of princes, does not grow through abuse and indefinite extensions, but in the end is at risk even within the limits of justice, as experience has taught more than once. Would that exceptional men both in your order and elsewhere occa-

hos affectus quibus non raro boni viri gravantur. Ego nec Sorbonicorum in vestros acta nupera, nec vestrorum in Jansenii memoriam laudare possum; et damnatas propositiones nasi cerei similes puto, cum nemo nesciat, quam varie possibilitatis necessitatisque nomina accipiantur.

Quae inter nos acta sunt per literas de philosophicis rebus, non puto communicationi in publicum qualicunque apta esse, divulgata scilicet, nec in systema collecta, quale a Te sperabam. Tibi ea, sapienti scilicet, non quibusvis scripsi; itaque minime conveniunt Novis Trivultianis ad popularia magis destinatis. Et spero Te pro Tua erga me benevolentia, non permissurum, ut tam alieno loco prodeant.

Ipsos Trivultianos collectores, viros quidem eleganter doctos rogandos putem ut inter recensendum malint indicare quae eximia aut profutura extant in libris, quam quae vana aut spernenda. Humana mens in Satyram et contemtum aliorum prona est: huic lectorum vitio nolim indulgeri, praesertim a viris religiosis. Vir aliquis bonus et doctus magno studio opus elaboravit, et in bonum publicum horas suas impendit: praemium inde nullum expectat aliud quam laudem. Cur nos bene animato malum reddemus pro bono et contemtu ac risu (si qua forte lapsus est) hominem ad poenitentiam laudabilis facti adigemus. Quod si qua moneri operae pretium sit, hoc velim ita fieri, ut autor sibi de nostra censura gratuletur.

Non multa in literis nova habeo: Nuper ad me relatum [est] inscriptionem Romanam in Silesia repertam, quod opido rarum est, nam Romani nunquam in Quadis aut Lygiis aut Marcomannis sedes habuere. Potuit captivo posita esse ab amico similiter capto, uti memini Turcam Hanoverae epitaphium Turcicum socio captivitatis erigere.

Suasi ut observationes nonnullae Berolinenses edantur praesertim cum sint aliquae eorundem phaenomenorum, quae in Observatorio Regio Parisino notata ex Commentariis Academicis anni 1704 didici.

In Anglia prodiit deperditus hactenus Apollonii Pergaei labor de sectione Rationis, in Arabico Mso a celeberrimo quondam viro Eduardo Bernardo observatus, nunc ab alio praestantissimo Geometra Edmundo Hallejo erutus.

sionally set aside or restrained those emotions with which many a good man is burdened. I can approve of neither the recent publications of members of the Sorbonne against your order nor those of your order against the memory of Jansen, and I find the condemned propositions similar to a wax nose, for no one knows how many different senses of possibility and necessity are understood.⁴

I do not think those things we have discussed in letters concerning philosophical matters are suited for communication in any sort of public way, for they are unorganized and not gathered together in a system, such as I was hoping for from you. I have written these things for you, namely for the wise, not for any one at all; thus, they are hardly appropriate for the *Mémoires de Trévoux*, which is intended more for a popular audience. I hope that you, by virtue of your goodwill toward me, would not allow them to appear in such an unsuitable place.

I believe the editors of the *Mémoires*, who are unquestionably learned men of good judgment, should be asked whether they prefer a review to point out the excellent or useful things in books as opposed to those that are mistaken or objectionable. The human mind is inclined to satirize and belittle the works of others; I should prefer not to indulge this vice of readers, especially among religious men. Some good and learned man has labored with great industry and has devoted his time to the public good. He expects no other reward from this than praise. Why shall we so eagerly give him evil in exchange for good and (if perhaps he has made some mistake) subject the man to punishment through scorn and derision for a praiseworthy deed? If there is something worth pointing out, I should want it done in such a way that the author congratulates himself on our criticism.

I do not have much news of literary matters. I was recently told about a Roman inscription found in Silesia, which is extremely rare, for the Romans never established a settlement among the Quadi, Lygii, or Macro-manni. It could have been placed there for a prisoner by a friend who had also been captured, just as I remember that a Turk in Hanover inscribed an epitaph in Turkish on behalf of an imprisoned companion.

I have been persuaded to publish some of the observations I have made in Berlin, especially since some concern the same phenomena that have been noted by the Royal Observatory in Paris, as I learned from the *Commentaries* of the Academy of 1704.

The work, until now lost, of Apollonius of Perga on the cutting of a ratio has appeared in England. It was recognized for the first time in an Arabic manuscript by a certain illustrious man, Edward Bernard; now it has been rescued by another most distinguished geometer, Edmund Halley.⁵

Cl. Hartsoekerus Batavus Conjecturas suas Physicas nuper editas ad me misit quibus novum systema tentat, vel potius ante paucos annos publicatum prosequitur. Multa habet ingeniosa, sed profundius adhuc latent interiora naturae, quam ut certas rationes effectuum compositorum in hac philosophiae infantia sperare fas sit.

Ptolemaeo gratulor quietem: si munus suscepisset, non tam ipsi quam ordini Vestro gratulandum fuisset. Nunc magnum opus Bellarmini renovati et aucti ab ejus doctrina et ingenio spero. Nec dubito acerbiora Bellarminiana, bella, arma, minas, temperaturum, daturumque operam, ut veritatis et fructus potissimum rationem habuisse judicetur.

Ubi Hanoveram reversus fuero, quod mox fiet, facilius ad commercia literaria aliquid conferre potero. Interea vale et fave. Dabam Berolini 5 Feb. 1707.

Deditissimus

G. G. Leibnitius

Des Bosses to Leibniz

Illustrissime vir, Patrone Colendissime

P[ax] C[hristi]

Tandem aliquando Hannoveram te salvum incolumemque rediisse gaudeo et gratulor. Litterae tuae Berolini pridem datae tanto mihi fuere cariores, quanto minus a te tam procul commorante multisque negotiis distracto aliquid expectandum putabam. Sed cum hoc ipsum, tum spes quam faciebas propinqui reditus tui, suaserunt ut responsum in reditum illum tuum differrem.

Historiam congregationum de auxiliis videbis cum lubebit et vacabit, nam ingens volumen est. Quod odiosis abstinendum utrimque caves, amicis pacis et boni communis consilium exosculor. Optimum sane erat, si modo utrimque, nam si justa defensio exigit, odiosam licet veritatem cum inculptae tutelae moderamine manifestari, non, opinor, improbabis.

Infallibilitatem Ecclesiae in rebus facti quod attinet. Certum est Ecclesiam in quaestionibus de facto particulari ad doctrinam fidei non pertinente errare posse; sed controversia est de quaestionibus facti spectantis ad fidei doctrinam, cum scilicet autor quispiam ab Ecclesia idcirco

The celebrated Dutchman Hartsoecker sent me his recently published *Physical Conjectures*, in which he proposes a new system, or rather follows up on one published a few years ago. It contains many clever things, but the secrets of nature are still hidden too deeply to be able to hope for definite causes of complex effects in this childish philosophy.⁶

I congratulate Tolomei on his repose; if he had assumed the office [of superior general], it would have been a cause for rejoicing more for your order than for him. I hope now that the great work of Bellarmine is renewed and advanced by his teaching and genius. I do not doubt that he will moderate the harsher battles, attacks, and threats of Bellarmine and that he will apply himself in such a way that he will be judged to have had the highest regard for both truth and success.⁷

When I have returned to Hanover, which will be soon, I shall be able to contribute to our exchange of letters more easily. For the rest, farewell and think kindly of me. From Berlin, 5 February 1707.

Most faithfully,
G. W. Leibniz

18. Des Bosses to Leibniz¹

[Hildesheim, 25 June 1707]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

I rejoice and give thanks that you now at last have returned safely to Hanover. The letter you wrote long ago in Berlin was the more precious to me, as I hardly thought anything was to be expected from you while you were delayed so far away and distracted by many affairs. This and the hope you raised of your imminent return convinced me to postpone a reply until your return.

You will be pleased and relieved when you see the *History of the Controversies concerning the Aids of Divine Grace*, for it is a remarkable book.² Because you caution both sides to abstain from offensive remarks, I eagerly embrace the friend of peace and the party of the common good. It would indeed be best, provided that both sides do so, for if a just cause requires it, you will not disagree, I suspect, that a harmful truth may be exposed when a blameless defender deems it appropriate.

Concerning the infallibility of the Church in matters of fact, it is certain that the Church can err in questions of particular fact that do not pertain to the teaching of the faith; but the controversy concerns questions of fact that do relate to the teaching of the faith, since it is obvious that any author

damnatur, quod doctrinam non sanam in scriptis suis tradiderit. Duplex autem est hujusmodi quaestio: prior, utrum autor ille revera sententiam haereticam quae ei tribuitur, in mente habuerit, quanquam hoc factum potius ad personam quam ad doctrinam pertinet. Posterior: utrum doctrinam illam in scriptis suis expresserit; et hoc factum est proprie *doctrinale*. Bellarminum aliosque Theologos nostros dum Concilia ipsa Generalia circa facti quaestiones falli posse asserunt, sententiae infallibilitatem quoad posteriores facti quaestiones astruentium repugnare minime arbitror. Nam infallibilitatis hujus patroni, Ecclesiam in iis quae pendent ab hominum privatis testimoniis, errare posse non negant, nec diffitentur eam per se ac infallibiliter per se non discernere germanam sententiam in mente cujuspiam auctoris delitescentem. Sed hoc solum contendunt: Ecclesiae iudicium in discernenda germana sententia quam suis in scriptis expressit autor, nulli prorsus errori obnoxium esse, et si quis contrarium docuerit, eum censent commodis praesentibus affectibusque doctrinam dare poenitentiam, ut phrasi tua significantissima utar.

Equidem quod iniquum sit imponere omnibus ut in rebus ejusmodi de interiore assensu jurare debeant, si ille hic in potestate non sit, nec adsint quae sufficiant ad persuadendum, fatentur ultro, sed vel inde Ecclesiae tribuendam eam quade agitur infallibilitatem arguunt, cum constet hunc assensus interioris super ejusmodi rebus etiam sub Anathematis poena praecipienda morem Ecclesiae semper fuisse usitatum, quod durum, imo tyrannicum foret, nisi Ecclesiae infallibilitas in hoc negotio suae sibi conscia semper fuisset.

Prolationibus nimiis Ecclesiae perinde ut Principum auctoritatem, etiam intra aequum periclitari posse, verissime dictum. Sed videndum, nimiane sit ista de qua nunc sermo est, ac non potius ex ea quam Catholici omnes Ecclesiae tribuunt, infallibilitate circa ipsum dogma sponte profluat, uti egregie expendit Cameracensis Archiepiscopus in libello quem una cum *Causa Quenelliana*, Processu Gerberoniano, ac *Historia quinque Propositionum Jansenii* tibi in reditu tradendum pridem commisi nostris Hannoverae degentibus, jamque ad manus tuas pervenisse spero. Qui quidem libellus eo majus apud cordatos omnes pondus habere debet, quod auctoris interrerat, veram non fuisse quam tuetur sententiam. Sed enim Praesul egregius dum Ecclesiae commodis et veritati causam suam posthabuit,

is condemned by the Church on the grounds that he has propounded an unsound doctrine in his writings. But this sort of question is twofold: first, whether the author in fact had in mind the heretical opinion attributed to him—a fact that concerns the person rather than the doctrine; second, whether the doctrine was expressed in his writings, and this fact is properly speaking “doctrinal.” I believe Bellarmine and others of our theologians, when they assert that even general councils can be mistaken regarding questions of fact, were not at all opposed to the infallibility of the opinion of the contributors in the latter questions of fact. For they do not deny that the Church, of whose infallibility they were the defenders, can err in those things that depend on the private testimony of men, nor do they deny that the Church does not by itself, let alone infallibly by itself, discern the actual opinion concealed in the mind of any author, but they maintain this alone: the judgment of the Church in deciding the actual opinion that an author expressed in his writings is subject to absolutely no error, and if anyone should teach the opposite, they will insist that it gives to present interests and emotions a doctrine for which one would have to suffer in the future, to use your most apt phrase.

They willingly admit that it is indeed unfair to require that each person vow obedience on the basis of an internal assent in matters of this sort, if this does not lie within his power and there is nothing sufficient to persuade him; for this reason they declare only that the aforementioned infallibility should be attributed to the Church, since it is agreed that the practice of enjoining internal assent with respect to matters of this sort even under the penalty of anathema has always been the custom of the Church, however harsh, and indeed it would be tyrannical if the infallibility of the Church had not always been conscious of itself in this situation.

It is most true that the authority of the Church, like that of princes, can be at risk even within just limits as a result of excessive extensions; but we should consider whether what is now under discussion is excessive and does not rather flow freely from that infallibility that all Catholics attribute to the Church regarding dogma itself, as the archbishop of Cambrai brilliantly lays out in the pamphlet I entrusted to our brothers in Hanover to be delivered to you on your return, along with *The Quesnel Case*, *The Trial of Gerber*,³ and the *History of Five Propositions of Jansen*, and which I hope has reached you by now. Indeed, this little work should have all the more influence among all judicious people, because it did not matter to the author that the view he was examining was not true. But certainly this eminent authority, when he set aside his cause of truth and the advantage of the Church, erased every taint fully, if before he had perhaps produced any,

maculam si quam ante fortasse contraxerat, omnem abunde delevit, exemplumque dedit quod utinam imitentur demum Janseniani. Caeterum intellexi nuper de hoc ipso argumento posteriores alias dissertationes duas eodem autore prodiisse, in quarum altera speciatim ostendit Bellarmini sententiam non aliam fuisse quam supra dixi.

Possibilitatis et necessitatis nomina varie accipiuntur illa quidem, sed quaeritur an ea in significatione homini tribuantur a Jansenio quae veri nominis libertati qualem Ecclesia semper docuit, non repugnet. Hanc quaestionem rursus in supra laudato Cameracensis Archiepiscopi opusculo, nec non in Historia quinque Jansenii Propositionum praeclare illustratam reperiēs. Utinam Jansenius talem saltem possibilitatem, eamque solum necessitatem astruxisset qualem Nicolius in opusculo posthumo cui titulus: *Systema gratiae universalis*, cujus synopsis in Diario Trivultiano videre potuisti. Verum Janseniani dum hoc Nicolii opusculum calculo suo probare renuunt, satis indicant Jansenium plus aliquid voluisse quam Nicolium.

De iis quae circa philosophiam mecum communicasti per litteras, quaeso ne sollicitus sis. An ego quae te in scio vulgare nolui, vulgarem invito? Mihi satis est intellexisse mentem tuam. Tu vero dabis veniam inconsultae petitioni meae. Seduxerant me Schediasmata Mathematica in Diariis passim reperta, quae non minus quam metaphysica vulgi captum superant. Plane expedit ea non nisi systemati, quale meditor, inclusa prodire, quanquam vereor ne materiam tuam artificis inscitia delerat.

Trivultianis collectoribus, cum opportunum erit sensa tua perscribam, nec dubito quin pro ea in qua te apud eos esse novi veneratione, aequissimum tuum consilium libenter accipiant. Scio satyricum salem qui primis Diarii Parisiensis tomis aspersus multorum palato sapuerat, in posterioribus desideratum esse a nonnullis sed tanti non est ut cum caritatis et aequitatis dispendio lectoris maligni stomachum pervellendum putem. Quanquam fateberis, difficile quandoque esse satyram non scribere ut E. G. si quis S. Bernardum protestantem fuisse probet ex eo quod in Christi meritis fiduciam omnem suam posuerit.

De iis quae circa Jansenium acta sunt quid dicam? Iliacos intra muros peccatur et extra. Sed nihil hoc ad rei summam, in qua victrix causa Deo placuit. Caeterum quod nec Ecclesia ipsa Romana, quae contra Jansenium scripta sunt, omnia probavit, indicio sunt tot librorum censurae ab ipsa profectae.

and he gave an example that one wishes the Jansenists would only imitate. Moreover, I recently learned that two further essays by the same author dealing with this topic have appeared, in one of which he shows step by step that Bellarmine's view was exactly as I described it above.⁴

The words "possibility" and "necessity" are indeed understood in a variety of ways, but the question is whether they are attributed to human beings by Jansen in a sense that does not contradict the truth of the word "freedom," such as the Church has always taught it.⁵ You will find this question brilliantly illuminated again in the above-mentioned work by the archbishop of Cambrai as well as in the *History of Five Propositions of Jansen*. Would that Jansen had upheld at least such a possibility and only that necessity that Nicole did in his posthumous work *A System of Universal Grace*, whose summary you would have been able to see in the *Mémoires de Trévoux*. Certainly when the Jansenists refuse to approve of this book by Nicole on account of his reasoning, they show clearly that Jansen wanted something more than Nicole.⁶

I ask that you not be anxious about the things you have discussed with me in letters concerning philosophical matters. Would I entertain the public with things that I have not wanted you to share with the ignorant? It is enough for me to have understood your views. But you will forgive my unsolicited advice. The mathematical essays found here and there in the journals had misled me, and these no less than the metaphysical essays exceed the grasp of the public. Clearly it is helpful to make these known only when they are united in a system such as I dream of, although I fear the unskillfulness of the craftsman may destroy your material.

When the time is right, I shall write fully of your views to the editors at Trévoux, for I do not doubt they will readily accept your most reasonable plan regarding those things in which I have found them to hold the greatest respect for you. I know that the satirical wit that first stained the pages of the Paris journals was to the taste of many; later it was demanded by some. But it is not such that I think it should excite the anger of a spiteful reader at the expense of charity and moderation, although you will admit it is difficult at times not to write satirically, as for example if someone should argue that St. Bernard was a Protestant from the fact that he based his entire faith on the merits of Christ.

What shall I say of the events surrounding Jansen? It is a shame that the Trojans are both within the walls and without. But that is nothing compared to the most important point, which is that the winning side was pleasing to God. Furthermore, the fact that there have been so many more books censored by the Roman church is proof that it itself does not approve of all the things written against Jansen.

Philosophia vera quae nuper sub ficto nomine Aloysii Temmick prodiit, de qua in penultimis tuis memineras, foetus est cujusdam e nostris ante duos circiter annos Aschaffenburgii defuncti. Rejectus fuerat hic liber tam in censura Provinciae, quam in Romana sed tandem externi cujusdam opera editus est in lucem a Wolfgango Michelles, Typographo, non Coloniensi, ut libri frons mentitur, sed Herbipolensi, qui tamen a loci Episcopo nunc vetitus est exemplaria ultra distrahere. Mihi inter caetera non placet, quod tantopere contendit formas omnes humana excepta meros esse materiae modos, nam quomodo rei mere passivae modus activa vi pollere possit juxta tecum non video. Deo vero soli actionem tribuere quid aliud est quam philosophiam evertere? Ac quoniam modorum mentio incidit aveo scire quid sentias de quantitate molis sive extensione quam alicubi dicis nil aliud esse quam jam praesuppositae nitentis renitentisque id est resistentis substantiae continuationem sive diffusionem. Haec ipsa continuatio sive diffusio est ne modus tantum substantiae an aliquid plus quam modaliter ab ipsa distinctum, id est accidens absolutum. Quod modus merus esse non possit probare videtur argumentum simile illi quod formas materiae modos non esse evincit, nam sicut modus rei ex se non activae actionem praestare non potest, ita modus rei ex se non extensae, qualis est substantia, nec ipse per se extensionem praestabit.

Quaesivi in libro Newtoni locum in quo nititur probare admittendum esse vacuum sed reperire non potui. Gratum facies si paginam indicaveris, simulque verbo unico mentem tuam de illo argumento insinuaveris.

Accludo litteras Clarissimi Domini Behrens, unaque synopsis tomi quarti mensis Junii Papebrochiani. Vale illustrissime Domine, meque solita tua benevolentia proseguere. Dabam Hildesiae 25 Junii 1707.

Illustrissimae Dominationis tuae

Observantissimus

Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Admodum Reverende Pater, Fautor Honoratissime

A reditu meo valde distractus fui. Itaque humanissimis Tuis non prius, ut par est, respondere licuit. Gratias ago, quod indicas, Aloysium Tem-

The True Philosophy, which recently appeared under the pseudonym of Aloysius Temmik and which you mentioned in your last letter but one, was produced by a member of our order who died at Aschaffenburg about two years ago.⁷ The book had been rejected both by the censor of the province and by that in Rome, but through the efforts of an outsider it was finally published by the printer Wolfgang Michelles (not in Cologne, as the frontispiece of the book falsely states, but in Würzburg), who nonetheless now has been prohibited by the local bishop from distributing copies abroad. Among other things that displease me is the fact that he argues so strongly that all forms, with the exception of the human, are mere modes of matter, for how can a mode of a merely passive thing be powerful enough for an active force? I do not see how this can be so according to you. Indeed, does not ascribing all action to God alone amount to overturning philosophy? And as we are discussing modes, I am eager to know what you think about the quantity of mass or extension that you somewhere say is nothing but the continuation or diffusion of the already presupposed striving and resisting, or resistance, of a substance. Is this very continuation or diffusion only a mode of substance, or is it something that is more than modally distinct from it, that is, an absolute accident? That it cannot be a mere mode seems to be proved by an argument similar to that which shows that forms are not modes of matter, for just as the mode of a thing that is not active in itself cannot exhibit action, so the mode of a thing that is not extended in itself, such as substance, will not exhibit extension.

I was looking for the passage in Newton's book⁸ in which he endeavors to prove that a vacuum should be admitted, but I could not find it. I shall be grateful if you could indicate the page and at the same time add briefly your view of this argument.

I am enclosing a letter from the excellent Behrens, along with a summary of the fourth volume from the month of June of Papebroch's work.⁹ Farewell, most distinguished Sir, and honor me with your customary goodwill. From Hildesheim, 25 June 1707.

Your Excellency's most respectful
Bartholomew Des Bosses, S.J.

19. Leibniz to Des Bosses¹

[Hanover, 21 July 1707]

Most Reverend Father, Most Honored Supporter,

Since my return I have been extremely preoccupied. Consequently I have been unable to respond sooner, as I ought to have, to your most kind

mick nomen esse fictum, et peto, ut verum me doceas. Etsi autem non probem primarias sententias auctoris, optarem tamen concedi doctis, etiam vestris, philosophandi libertatem, quae aemulationem parit et ingenia excitat: contra animi servitute dejiciuntur, neque aliquid egregii ab iis exspectes, quibus nihil indulgeas. Itaque Itali et Hispani, quorum excitata sunt ingenia, tam parum in philosophia praestant, quia nimis arctantur. Quae Temmigijs ille pseudonymus scribit, publice in Gallia tuentur multi eruditi.

Scripsit olim aliquis *Concordiam Scientiae cum Fide sub nomine Thomae Bonartis Nordtani Angli*. Eum ex vestro fuisse ordine et ob librum reprehensiones sustinuisse didici: ipsum viri nomen vellem discere beneficio Tuo. Habemus librum ejus, scriptum eleganter et ingeniose, sed obscuriuscule: itaque non satis excutere licuit. Si Tibi lectus non est, et legi dignus videtur, mittam.

Quia Tibi cum Trivultianis commercium est, vide quaeso, an schedam adjectam iis commode communicari posse putes, ut mensi alicui inseratur. Mea enim interest, ut lectoribus occasio sinistre de me meisque rebus judicandi adimatur.

Non bene capio, quid P. Perez, cujus notum mihi ingenium est, per *Metaphysica indivisibilia* intelligat, quod ex aliis ejus locis facile erues. Si intelligeret Monades, mihi consentiret. Et spatium sane ex Monadibus non componitur: quae an et Perezii de suis indivisibilibus Metaphysicis sententia sit, scire e re erit, certe Mathematicis opponit. Possem interim hac ejus phrasi ad Monades meas designandas uti; quas et aliquando atomos Metaphysicas vocare memini, item substantiales. Spatium per se est indeterminatum ad quascunque possibiles divisiones, res enim est idealis, ut unitas numerica, quam pro arbitrio in fractiones secare possis, at massa rerum actu divisa est.

Hartsoekeri liber, quem ad me misit, jacet in cista, quam adhuc Berolino expecto; acceptum mittam. Duo ponit principia, nempe partes materiae alias perfecte fluidas et alias perfecte firmas. Hanc hypothesin vulgares Philosophorum notiones non facile refutaverint; apud me stare non potest.

Newtonus (quantum nunc judicare possum, dum librum percurrere non vacat) videtur demonstrationem vacui suam non tam absolutam exhi-

letters. Thank you for informing me that Aloysius Temmik is a pseudonym; I ask that you tell me his real name.² Even if I do not approve of the main views of an author, I should like to have conceded to the learned, even of your order, the freedom of philosophizing, which inspires competition and arouses intellects. They rebel against the servitude of the mind, and you may expect nothing extraordinary from those to whom you concede nothing. That is why Italians and Spanish whose intellects have been awakened produce so little in philosophy, for they are excessively constrained. The things that the pseudonymous Temmik writes are defended publicly by many learned people in France.

Someone once wrote a book, *The Harmony of Knowledge with Faith*, under the name Thomas Bonart of the north of England. I have learned that he was a member of your order and that he suffered repercussions as a result of the book. I should like to learn with your help the name of the man himself. We have his book, which is elegantly and cleverly written, though somewhat obscure. This is why I have not been able to examine it properly. If you have not read it, and it seems worth reading, I shall send it.³

Since you are in communication with the editors at Trévoux, I ask whether you think the enclosed sheet could easily be sent to them for inclusion in some month's issue. It is important to me that readers not be given an opportunity to misjudge me and my works.⁴

I do not understand what Father Perez, whom I know to be intelligent, means by "metaphysical indivisibles," something you will easily discover from other passages of his.⁵ If he means monads, he agrees with me. Yet space certainly is not composed of monads: it remains to be established whether this is also Perez's view concerning his metaphysical indivisibles—clearly he opposes them to mathematical indivisibles. In the meantime, I shall be able to use this expression of his to designate my monads, which I remember calling at some point "metaphysical atoms" and also "substantial atoms."⁶ Space in itself is indeterminate with respect to any possible divisions, for it is an ideal thing, like numerical unity, which can be divided arbitrarily into fractions, whereas a mass of things is actually divided.

Hartsoecker's book, which he sent to me, is in the trunk I am still awaiting from Berlin; I shall send it on when it arrives.⁷ He posits two principles, namely that some parts of matter are perfectly fluid and that others are perfectly hard. The ordinary notions of philosophers have not easily refuted this hypothesis; by my lights, it cannot stand.

Newton (as far as I can judge at the moment while I lack the leisure to look over his book) seems not to have presented his full demonstration of

buisse quam insinuasse p. 346 Principiorum Naturae Mathematicorum, ubi experimenta exhibet, ex quibus putat pendere demonstrationem vacui. Ego vero non video, quomodo possibile sit experimenta excogitari, unde haec controversia accurate definiatur, quam a rationibus unice pendere censeo. Inspicies hunc locum, quem quaerebas, et si videtur, examinabis.

Venio ad controversias Vestrorum, optaveramque odiosis utrinque abstineri. Id Tu, Admodum Reverende Pater valde laudas, modo fiat utrinque. Fortasse tamen laudabilior erit, qui a sua parte faciet, quamvis mutua humanitas non reddatur: et religiosis hominibus, imo virtutem colentibus omnibus, dictum ego putem illud Virgilianum:

Tuque prior, tu parce genus qui ducis Olympo,
Projice tela manu sanguis meus.

Porro quae ad irrisiōnem faciunt, pejora dictis injuriosis censeo, nam magis mordent, et minus facile depelluntur. Persecutiones autem ob sententias, quae crimina non docent, pessimas censeo, a quibus non tantum abstinendum sit probis, sed et abhorrendum, et in id laborandum, ut alii, apud quos nobis aliqua est auctoritas, ab iis deterreantur. Honores et comoda, quae non debentur, iis negare permissum est, qui sententias foveant, quae nobis incommoda videntur: sua auferre, et magis etiam proscriptionibus, vinculis, remis gravioribusque adhuc malis saevire permissum non puto. Quid hoc enim aliud est quam violentiae genus, a quo nisi per crimen (abjurando quae vera putas) tutus esse non possis? Itaque quanto quisque melior est, tanto magis sub hac tyrannide laborat. Et sane si mihi esset facultas persuadendi, Gerberonius et similes plenissima libertate fruerentur. Fac (quod objicis) redituros in antiquam sylvam, fac scribere, fac tueri sententiam: aequis armis non vi metuque errores subverti debent: imo fac stare errores, id levius in talibus est malum, quam sic agi. Quin cadunt plerumque neglecti facilius quam pressi. Nullus hodie esset, quem vocatis, Jansenismus, nisi tantum contra Jansenii opus strepitum homines infesti excitassent, quibus factionis, non veritatis cura erat. Jansenii Augustinum aliquando non sine cura inspexi: egregium opus esse deprehendi, et magno doctrinae Theologicae malo eruditorum manibus excus-

the void so much as just hinted at it on page 346 of the *Mathematical Principles of Nature*, where he describes experiments on which he thinks the demonstration of the void depends.⁸ But I do not see how it is possible to devise experiments that would allow this controversy to be rigorously decided, for I believe it depends on reasoning alone. Have a look at this passage and see whether it seems to be the one you were looking for.

I come now to the controversies of your order. I had hoped that both sides would refrain from offensive remarks. You, Most Reverend Father, strongly praise this, provided both sides do so. However, perhaps the side that does so on its own initiative will be the more praiseworthy one, even if its kindness is not returned; and I believe Virgil directed these lines to religious men, and indeed to all those who cultivate virtue:

may you, who come from heaven's seed, born of
my blood, cast down the weapon from your hand!⁹

Furthermore, I believe their mockery is worse than hurtful words, for it cuts deeper and is less easily repelled.

But what I find worst of all is persecution on account of opinions that do not encourage criminal acts, a practice from which honorable men should not only refrain, but which we should also abhor and work against so that others, over whom we have some authority, are discouraged from it. It is permissible to deny honors and favors that are not owed to those who advance views that seem to us unfavorable; but I do not think it permissible to seize their property and, what is more, to threaten them with proscriptions, imprisonment, beatings, and still more serious evils. For what is this but a kind of violence, against which one cannot be secure except through a crime (by abjuring what one believes to be true)? And so, someone is better, the more he suffers under such tyranny. And indeed, if it were within my powers of persuasion, Gerberon¹⁰ and others like him would enjoy complete freedom: let them return (which you oppose) to the ancient forest,¹¹ let them write, let them defend their opinions. Their errors should be overturned with equal arms, not by force and fear; no, on the contrary, let their errors stand: the evil in them is less than in the actions taken against them. In truth, they die much more readily from neglect than from suppression. There would be nothing today of what you call Jansenism if hostile men had not provoked an uproar against the work of Jansen, in which more attention was given to partisanship than to the truth. I once examined Jansen's *Augustinus* with some care: I found it to be a distinguished work, and that a great evil was done to theology by wresting it from the hands of the learned, even though I do not approve of most of his opinions.¹² It

sum, etsi sententias ejus plurimas non probem. Notare mihi visus sum, consilium ei fuisse non tantum Systema Theologicum Augustini revocare in scholas, quod improbari non poterat; sed et contraria dogmata tanquam Pelagiana aut Semipelagiana ejicere, quod probare non possum. Valde noxium est constringi indies sentiendi libertatem non necessariis definitionibus. Fac quaedam esse, in quibus Scholastici quidam Pelagianis consentiant, an ideo statim damnandi sunt? Ipse Augustinus quasdam suas priores sententias, Pelagiana controversia invalescente, mutavit. Sufficit conclusiones Pelagianas et Semipelagianas primarias et ab Ecclesia antiqua rejectas vitari. Itaque ita sentio, si Jansenius aut Janseniana pars scopum obtinuisset, multo adhuc graviolem futuram fuisse servitutem: et in Jansenio reprehendi merito poterat condemnandi alios inconsulta vehementia. Sed evenit, nescio quo fato, ut reprehensa sint tanquam Janseniana, quae mihi, ut verum fatear, Jansenius docuisse non videtur: nam plus simplice vice protestatur, a se et Augustino vocabula libertatis, necessitatis, possibilitatis, impossibilitatis longe alio sensu sumi, quam qui in scholis est receptus; in quo theses receptas se non negare ait, sed tamen de iis nec laborare. Itaque vereor, ne irrita sint illa Vaticana in eum fulmina, verissimaeque exceptiones amicorum Jansenii, quidvis potius in animo fuisse viro, quam sensum illum obvium censorum Romanorum. Nam sensus verborum hodie obvius in scholis, apud veteres obvius non erat. Et saepissime expertus ipse sum, quam varie ea ipsa verba ab hominibus sumantur inter loquendum pariter et scribendum; idque in populari sermone non minus, quam inter eruditos. Itaque miratus sum, Dumasium vestrae partis scriptorem Historiae Jansenismi suae non addidisse, quod basis operis esse debebat, indicem locorum Jansenii, in quibus extent propositiones damnatae, ut facilius conferri possent. An putat in re, quae oculari inspectione constat, Vaticanorum Censorum autoritatem, et extortas subscriptiones sufficere posse? Archiepiscopi Cameracensis, viri certe magni et ob alia mihi valde aestimati, subtilitates miras, quibus in facti quaestionibus infallibilitatem Ecclesiae vindicat, discutere non vacat, neque mihi certe eo labore opus est: qui sentio nullam Ecclesiae infallibilitatem esse, nisi in conservandis dogmatibus salutaribus, dudum a Christo traditis; caetera ad disciplinam pertinere, ubi reverentia sufficit, assensus necessarius non est. Si Roma definisset, Antipodes non esse, si hodie motum terrae damnaret, an infallibilem habendam putaremus? Et licet mos

seemed to me to indicate that his plan had been not only to bring back the theological system of Augustine in the schools, which could not be faulted, but also to drive out opposing views, such as those of the Pelagians and Semi-Pelagians, of which I cannot approve.¹³ It is extremely harmful that freedom of thinking be restrained from day to day within unnecessary limits. Suppose there are points on which some Scholastics agree with the Pelagians; should they for that reason immediately be condemned? Augustine himself changed some of his earlier opinions as the Pelagian controversy grew. It is enough that the principal Pelagian and Semi-Pelagian conclusions and those rejected by the early Church be avoided. Thus, my view is the following: if Jansen or the Jansenist party had achieved their goal, servitude would have become still more onerous, and one could justly fault in Jansen an ill-advised zeal to condemn others. But it happened, by who knows what chance, that views have been criticized as Jansenist which, to speak truthfully, Jansen seems not to have taught, for he states quite candidly in his defense that the words “freedom,” “necessity,” “possibility,” and “impossibility” are used by him and Augustine in a very different sense from that accepted in the schools; for this reason, he says, he does not deny received theses but simply does not trouble himself with them. This is why I fear the Vatican charges against him are baseless, and the objection of the friends of Jansen most valid, namely, that whatever had been in the man’s soul was more evident than the sense of the Roman censors. For the sense of words evident today in the schools was not evident among the ancients. I myself have very often experienced how differently those very words are understood by people in speaking as well as in writing, and this in colloquial speech no less than among the learned. And so I am surprised that Dumas of your side, author of the history of Jansenism,¹⁴ did not add to his work what should have been its foundation: an index of the passages in Jansen in which the condemned propositions are found, so that they could be consulted more easily. Does he think that in a matter that depends on visual inspection, the authority of the Vatican censors and of coerced signatures can be enough? There is no time to demolish the amazing subtleties of the archbishop of Cambrai,¹⁵ certainly a great man and greatly esteemed by me on other counts, in which he defends the infallibility of the Church on questions of fact; nor is there, in my view, any need for this labor, for I believe there is no infallibility of the Church except in preserving the dogmas of salvation delivered long ago by Christ; the rest pertains to doctrine, where respect is sufficient and assent not necessary. If Rome should determine that the antipodes do not exist, if today the motion of the Earth were condemned,

ille malus in Ecclesia invaluerit nova dogmata fidei procudendi et alios condemnandi praeter necessitatem, non ideo minus improbari, aliisque abusibus, qui irrepsere, computari debet. Articulus certe salvificae fidei non est, Jansenium aliquid docuisse: quae haec ergo est κακοζηλία, velle exprimere omnibus inanis sententiae professionem? Ita dum iniquum petunt homines, nec aequum ferunt. Vellem demonstrari ab aliquo, quae vera fuerit Jansenii sententia, quod homini diligenti et perito non difficile puto: sed utilius adhuc erit discutere, quid senserit Augustinus, ob viri merita et auctoritatem; quanquam verear, ne Augustinum Jansenio plerumque ὁμόνηρον reperturi simus; tanto ille studio excussit, et ut arbitror, non minori etiam fide repraesentavit. Ab Augustino postea schola recessit, nec ut mihi videtur, male in multis. Vellem tamen systema tanti viri notius esse, quam esse video. Dum distinguis duas propositiones, unam quam autor in mente habuerit, alteram, quam expresserit, et posteriorem ad doctrinalia facta pertinere putas, de quibus infallibiliter statuere possit Ecclesia; videris mihi agnoscere, non debuisse aliquid definiri *de sensu ab autore intento*, quod tamen, ni fallor, a Pontificibus tandem factum est, parum ut arbitror consulte et per sollicitantium importunitates. Vides, quo tandem alios coercendi nimio studio deveniatur.

Philosophica meletemata non minus quam mathematica vulgi captum superant, sed magis interpretationibus iniquis obnoxia sunt. Itaque mallem connexa aliquando dari quam disjecta et ictibus exposita, dum se mutuo non tuentur.

Cum dico Extensionem esse resistentis continuationem, quaeris, an ea continuatio sit modus tantum? Ita putem: habet enim se ad res continuatas seu repetitas, ut numerus ad res numeratas. Substantia nempe simplex, etsi non habeat in se extensionem, habet tamen positionem, quae est fundamentum extensionis, cum extensio sit simultanea continua positionis repetitio, ut lineam fluxu puncti fieri dicimus quoniam in hoc puncti vestigio, ejus diversae positiones conjunguntur. Sed activum repetitione seu continuatione rei non activae nasci non potest. Quod superest vale et fave. Dabam Hanoverae 21 Julii 1707.

would we think that it should be considered infallible? And although this evil habit of producing new dogmas of faith and condemning others beyond necessity has become strong in the Church, it should not for that reason be deplored any less but should be counted along with the other abuses that have crept in.¹⁶ It is certainly not an article of salvational faith that Jansen taught something: what is this hyperzealousness that wants to extract the profession of an empty opinion from everything? Accordingly, when men seek something unjust, they do not support what is just. I wish someone would demonstrate what Jansen's true opinion was—I do not think this would be difficult for a careful and experienced person; but it would be even more useful to settle what Augustine believed, given the merits and authority of the man, though I fear we may discover that Augustine and Jansen were much of one mind, insofar as the latter studied the former carefully and to my mind represented him no less faithfully. Thereafter the schools drew back from Augustine, correctly, in my view, on many issues. Nevertheless, I wish the system of such a man were better known than I see it to be. When you distinguish two propositions, one of which the author had in mind, the other of which he expressed, and you believe the latter pertains to doctrinal facts on which the Church can pronounce infallibly, you seem to me to recognize that one was under no obligation to decide something "on the basis of the sense intended by the author," which nevertheless, unless I am mistaken, has ultimately been done by the popes, with insufficient deliberation, in my view, and at the insistence of provocateurs. You see where we finally arrive as a result of excesses of zeal for correcting others.

Philosophical essays, no less than mathematical ones, are beyond the grasp of the public, but they are more open to hostile interpretations. That is why I would prefer that one day they be presented united rather than piecemeal and exposed to attacks, as long as they are unable to defend each other.

When I say that extension is the continuation of resistance, you ask whether this continuation is only a mode. I believe so, for it is related to the things continued or repeated as number is to things numbered. That is, a simple substance, even though it does not have extension in itself, nonetheless has position, which is the foundation of extension, since extension is the simultaneous continuous repetition of position, just as we say that a line comes to be from the flux of a point, since in the trace left by a point its different positions are connected. Yet an active thing cannot arise from the repetition or continuation of an inactive thing.

For the rest, farewell and think kindly of me. From Hanover, 21 July 1707.

deditissimus

Godefridus Guilielmus Leibnitius

P.S. Adjunctam minorem Schedam Admodum Reverendis Patribus Ant-verpiensibus mitti peto.

Si in Memoriis Trivultiensibus non extaret illa Relatio quam refutare coactus sum, posset omitti postrema periodus in scheda adjecta. Quod si in iis extat reperietur anno 1705 in finem vergente, vel anno 1706 inchoante. Hic nondum novissima habentur.

Leibniz to Des Bosses

Admodum Reverende Pater

Fautor Honoratissime

Absens aliquamdiu et distractus paulo serius respondeo, eoque nomine veniam peto, ac ne nunc quidem omnibus Epistolarum Tuarum argumentis satisfacio. Adm. R. P. Orbani literas etiam novissime accepi.

Gaudeo esse Tibi cum adm. R. P. Turnemino commercium, ingenio doctrina caeterisque etiam laudibus cumulado. Puto ad eum Tuo favore pervenisse schedam meam qua ad notationem ejus circa unionem animae et corporis meae Hypothesi nonnihil oppositam respondi. Unde intelliget me per Harmoniam praestabilitam explicare phaenomenorum consensum, sed non ideo negare metaphysicam unionem suppositi, quae altioris est indaginis, et per phaenomena explicari nequit, sed et vicissim phaenomenorum rationem non reddit. Petii autem, ut Diario Trivultiano declaratio illa mea insereretur, si fieri posset commode. An factum sit non intellexi.

Domino Blondello in adjuncta scheda ut par est respondeo et R. P. Turnemino gratias ago quod hanc mihi a viro docto humanissimam etsi non necessariam excusationem procuravit.

Dn. Eccardus, ex quo Helmestadium vocatus est, in suis ad me literis admodum se occupatum queritur nec commercio literario ordinario vacare posse: Cum prius secretarium meum ageret Diarium eruditorum Germanico sermone non spernendum componebat, et subinde ad Gallos scribebat. Est mihi cum Dno. Menkenio filio patris in Actis Lipsiensibus edendis successore notitia. Videbo an cum eo commercium literarum R. P. Turne-

Most faithfully,
Gottfried Wilhelm Leibniz

P.S. I ask that the enclosed brief note be sent to the Most Reverend Fathers in Antwerp.¹⁷

If the report I am compelled to rebut does not appear in the *Mémoires de Trévoux*, the final paragraph of the accompanying sheet could be omitted; but if it is in the *Mémoires*, it will be found toward the end of the year 1705 or the beginning of the year 1706. We do not yet have the most recent issues here.¹⁸

20. Leibniz to Des Bosses¹

[Hanover, 3 September 1708]

Most Reverend Father, Most Honored Supporter,

Having been absent for some time and distracted, I am a little late in replying, for which I ask your pardon, and not even now do I satisfy all the concerns raised by your letters.² I have also just received the Most Reverend Father Orban's letter.³

I am delighted you are in communication with the Reverend Father Tournemine, a man filled with intelligence, learning, and every other merit. I believe that with your help he should have received my essay in which I responded to his note concerning the union of soul and body, which was somewhat opposed to my hypothesis.⁴ From this he may understand that I explain the agreement of the phenomena through preestablished harmony, but I do not thereby deny the metaphysical union of a complete substance, which belongs to a deeper inquiry and cannot be explained through the phenomena but also in turn does not offer a reason for the phenomena. However, I asked that my statement be published in the *Mémoires de Trévoux*, if this could be done conveniently. I have not heard whether it has been done.

I reply to Mr. Blondel on a separate sheet, as is proper, and I thank the Reverend Father Tournemine for having procured for me such a polite, though unnecessary, apology from this learned man.⁵

Mr. Eckhart, who has been called from here to Helmstedt, complains in his letter to me that he is very busy and cannot find time for a regular exchange of letters.⁶ When he first acted as my secretary, he proposed a learned journal in the German language, a worthy idea, and subsequently wrote to people in France about it. I am in contact with Mr. Mencke, successor to his father as editor of the *Leipzig Acta*. I shall see whether I can arrange an exchange of letters between him and Father Tournemine, if one

mino parare possim, si nondum habet: quanquam et de Dno. Eccardo amplius inquiram.

Gratus est mihi Ailesworthi vestri, quem indicas, locus in *Metaphysica Scholastica* 1675 edita extans. Mirarer sane si nemo contemporaneorum paradoxa ejus attigisset.

Cogitabo de aliquo Schediasmate pro Diario Trivultiano, quando ita favent. Nunc significo a me edi Roswitaе celeberrimaе poetriae et sanctimonialis Gandeshemensis amissum hactenus carmen nuperque e tenebris erutum de fundatione Gandeshemensis Ecclesiae, quod ad Historiam quaedam non spernenda docet. Biennio abhinc opera Roswitaе, a Conrado Celta circiter ducentis abhinc annis edita, Witebergae cura Cl. Schurzfleischii sunt recusa. Sed tunc illud carmen adhuc desiderabatur. Itaque inseram Tomo 2do meae collectionis scriptorum Brunsvicensia illustrantium. Tomum primum per Belgam quem memorabas Aurigam Brunsviga ad Antverpienses misissem, si illum Brunsvigae in nundinis expiscari potuissem. Nunc Forstero Bibliopolae nostro dedi in mandatis, ut Bibliopolae Coloniensi in instantibus nundinis Francofurtensibus consignari exemplum curet.

Etsi mihi ut beati ac damnati aliquem libertatis gradum retinere videantur, nempe ipsam contingentiam seu non necessitatem, unde illi adhuc laudabiliter, hi culpabiliter agunt; haud dubie tamen plus est in viatoribus (quos vocant) variabilitatis, cum in beatis major sit vis rationis, in damnatis major vis pravi affectus. An autem Jansenius hoc discrimen tollat inter viatores et confirmatos, nosse velim. Solet ipse libertatis et necessitatis vocabula longe aliter quam Schola accipere. Mihi interim Scholarum magis quam ipsius formulae probantur.

Domina Comitissa de Bukeburg mihi nuper legendum dedit librum novum inscriptum: *La Suite du Comte de Gabalis, ou nouveaux entretiens sur les sciences secretes, touchant la nouvelle philosophie*.^{L1} Ibi Carte-

L1. DRAFT: philosophie I, Amsterodami editum apud Petrum Mortier. Is libellus (si quid iudico) a viro aliquo ingenioso et docto ex vestris profectus est, qui si non est R. P. Daniel, saltem eum imitatur. Ut olim ad Gallum, qui librum inscriptum le Comte de Gabalis edidit, venisse fingebatur Comes quidam Silesius Cabalae Magiaeque deditus, ita nunc fingitur ad eundem ex Hibernia venisse Johannes quidam Brunus, doctor Theologus, Jordani Bruni abnepos, Cartesianismi et novorum in

does not exist already; however, I also shall inquire further about this with Mr. Eckhart.

Thank you for the passage from Ayleworth of your order, which you indicate is in the *Metaphysica scholastica*, published in 1675. I should be very surprised if none of his contemporaries had attacked his paradoxes.⁷

I shall think about a few pages for the *Mémoires de Trévoux*, seeing that they are well disposed toward this. For the moment, I announce that I have edited a poem by the renowned poet and religious Roswita of Gandersheim, a poem lost until now and recently rescued from oblivion, on the founding of the church at Gandersheim, which relates some things that should not be neglected by history.⁸ The works of Roswita, which were published by Conrad Celtes about two hundred years ago, were reprinted under the care of the distinguished Schurzfleisch at Wittenberg two years ago.⁹ But the poem was missing until now, and so I shall include it in the second volume of my collection of writings illustrating the affairs of Brunswick. I would have sent the first volume from Brunswick to Antwerp with the coachman you mentioned, if I had been able to look for him on a market-day in Brunswick. Now I have entrusted it to our bookseller Förster, in order that he may see that a copy is consigned to a Cologne bookseller at the next Frankfurt book fair.¹⁰

Although it seems to me that the damned as well as the blessed retain some degree of freedom, namely the very contingency or non-necessity whereby the latter still act in a praiseworthy manner and the former in a blameworthy manner, still, it can scarcely be doubted that there is more variability in (those they call) wayfarers, since in the blessed the force of reason is greater, whereas in the damned the force of base emotions is greater. I should like to know whether Jansen does away with the distinction between wayfarers and the confirmed.¹¹ He himself uses the words “freedom” and “necessity” very differently than is accepted in the schools. For my part, I prefer the formulas of the schools to his.¹²

The Countess of Bukeburg recently gave me a new book to read entitled *Sequel to the Comte de Gabalis, or New Dialogues on the Occult Sciences with Regard to the New Philosophy*.^{L1} In it Cartesians are wittily and clever-

L1. DRAFT: *Philosophy* |, published in Amsterdam by Pierre Mortier. This little book (if I am any judge) is by some clever and learned member of your order, who, if he is not the Reverend Father Daniel, at least is imitating him. Just as he who published the book entitled *Le Comte de Gabalis* imagined that there had arrived in France a certain Count Silesius, who was devoted to cabala and magic, so he now imagines coming to France from Ireland a certain Giovanni Bruno, a doctor of the-

siani salse et ingeniose irridentur, tanquam qui philosophiam probent maxime religioni adversam, ut major (si diis placet) sit triumphus fidei, quodmodo ei Baylius passim rationcinari videtur.

Cum olim Berolini totam pene aestatem cum Regina agerem, curiosa lectrice Baylianorum ac similium operum, et meditationibus delectata, plerasque difficultates quas Baylius contra religionem movet, primum inter colloquendum, deinde invitante Regina, annotationibus sustuleram. Eas ut in ordinem redigerem petiere amici. Feci et nunc recenseo, et videbo an Tibi legendas dare possim ante discessum Tuum. Libenter enim etiam vestrorum fruor iudicio. Sed Tuo inprimis, cujus eruditio facit ut possis, benevolentia erga me ut velis in meis examinandis rite versari. Etsi enim non dissimulem cujus sim partis, libenter tamen ita scribo, quantum licet, ut vestros a sententiis meis circa res quae controversias nostras non tangunt, abhorrere necesse non sit.

Scire velim an R. P. Dez quem Rex Christianissimus Hedraeo seu Chaeisio adiutorem dedit, is sit qui aliquamdiu olim Argentorati egit, et libros etiam de religionis controversiis edidit.

Quod superest vale et fave. Dabam Hanoverae 3 Septembr. 1708.

Deditissimus

Godefr. Guil. Leibnitius

Leibniz to Des Bosses

Admodum Reverende Pater

Fautor Honoratissime

Pro literis curatis curandisque gratias ago. Monitum Tuum perplacet, putemque rectius dici *je n'ay nul*.

Theologia dogmatum defensor, qui vult materiam in extensione consistere, accidentia nulla esse et tandem miro paradoxo (fere ut Baylius) philosophiam probat maxime religioni adversam, ut tanto major (si Dis placet) sit triumphus fidei. Sed res in tragoediam desinit, nam bonus ille Brunus iratus auctori in febrim incidit, atque inde moritur verisimiliter (iudicio auctoris) damnatus. | Cum olim

erly mocked as those who show that philosophy is entirely opposed to religion, so that the triumph of faith is greater (if it pleases the gods), as Bayle seems to argue in places.¹³

Once when I spent almost the entire summer in Berlin with the queen, an attentive reader of the works of Bayle and similar authors, and one who delights in philosophical thought, I removed some difficulties that Bayle had raised against religion, first in conversation, then at the invitation of the queen in written comments.¹⁴ Friends have asked that these comments be put in order. This I have done, and I am now reviewing them. I shall see whether I can give them to you to read before your departure, for I am also happy to receive the judgment of your order, but above all that of you yourself, whose learning makes you able, and kindness toward me willing, to occupy yourself with a careful examination of my writings. For though I do not hide which side I am on, nevertheless, as much as possible, I gladly write in such a way that your order does not have to reprove my opinions concerning matters that do not touch on our controversies.

I should like to know whether Father Dez, whom the most Christian king assigned to help Hedraeus or La Chaise, is the same person who was active some time ago in Strasbourg and also published books on religious controversies.¹⁵

For the rest, farewell and think kindly of me. From Hanover, 3 September 1708.

Most faithfully,
Gottfried Wilhelm Leibniz

21. Leibniz to Des Bosses¹

[Hanover, 12 September 1708]

Most Reverend Father, Most Honored Supporter,

I thank you for the care you have taken and continue to take on behalf of our correspondence. Your counsel pleases me greatly, and I believe it would be more just to say: "I have no reason to complain."²

ology and distant descendant of Giordano Bruno, a defender of the dogmas of Cartesianism and of innovators in theology, who maintains that matter consists in extension and that there exist no accidents, and finally in a surprising paradox (just like Bayle) shows that philosophy is entirely opposed to religion, so that the triumph of faith is all the greater (if it pleases God). But the story ends in tragedy, for the good Bruno, having angered the authorities, is led to the stake, and hence dies as if he were damned (in the judgment of the author). | Once when

Jansenius forte analogiam quandam inter caritatem beatorum et concupiscentiam non regeneratorum considerare voluit ex Augustini sententia, cui omnis actus in non regeneratis est peccaminosus, et virtutes non nisi splendida peccata. Itaque etiam non regenerati semper determinati forent ad unum quoad qualitatem, licet non quoad substantiam actus, quod ego quidem non probo, quemadmodum nec damnationem infantium non regeneratorum aliaque Augustini dura. Neque video cur necessaria sit illa gratia per se victrix quam passim inculcant qui Augustinum sequi profitentur aut cur non eadem mensura gratiae in uno possit effectrix esse salutis, quamvis in alio non sit. Puto Deum voluntate antecedente omnes salvos velle, neque eam otiosam esse, sed demonstrari per auxilia abundantia gratiae quae sit sufficiens ubi bona voluntas accedat, et hanc etiam interdum producat. Cum quaeritur an electio et quatenus sit gratuita; sentio Deum non quidem ad praevisas bonas qualitates, aut minorem resistantiam, vel simile aliquid futurum absolutum vel conditionale se adstringere, nec disputandum esse de ordine decretorum, utrum salutis an fidei vivae dandae decretum prius sit in intentione Dei; sed Deum ex infinitis mundis possibilibus optimum elegerisse omnibus ingredientibus spectatis. Itaque revera non nisi unicum Dei decretum erit de existentia talis rerum seriei, et cum mala quaedam optimam rerum seriem ingrediantur, hinc admittere. Libertatem non tantum a coactione sed et a necessitate eximendam censeo non tamen ab infallibilitate seu determinatione; semper enim ratio esse debet cur unum potius quam aliud fiat, nec ulla datur indifferentia perfecti aequilibrii. Interim ratio determinans inclinando determinat, non necessitando, cum aliter fieri non implicet contradictionem.

Multa alia observavi quibus plerasque difficultates satis clare expediri puto: et quantum judico sententiae meae non abhorrent in hac parte a decretis vestrae Ecclesiae, sed nec a vestri Ordinis placitis potioribus. Nam doctrinas illas, sub quibus Divina Bonitas laborare videri possit, minus amo, etsi alias Augustinum, Arnaldum et Quenellium magnificiam. Itaque aliquem mihi etiam apud Vestros applausum promitto. Nunc in eo sum, ut quaedam turbatiora in mundum redigantur.

Colloquium illud consecrarium colloquii cum Comite de Gabalis in Batavis editum puto.

Chronostichorum vel potius Arithmostichorum artificium non sperno,

Jansen wanted to draw an analogy between the charity of the blessed and the concupiscence of the unregenerate, based on the opinion of Augustine, for whom every act of the unregenerate is tainted with sin, and virtues are nothing more than splendid sins. Thus, even the unregenerate would always be determined to one thing as far as the quality of the act is concerned, if not its substance. This is an opinion I certainly do not support, just as I do not support the damnation of unregenerate³ infants and other harsh views of Augustine. Nor do I see why there must be that grace that is victorious by itself, which those who profess to follow Augustine generally insist on, or why the same measure of grace cannot be the producer of salvation in one person, though it is not in another. I believe that God wants everyone to be saved by an antecedent will, and that this will is not idle but is demonstrated through the abundant aid of grace, which is sufficient when a good will is present, and sometimes even produces one. When it is asked whether there is an election, and to what extent it is gratuitous, I hold that God certainly does not restrict himself to foreseeing good qualities, or less resistance, or some similar absolute or conditional future. Nor should we argue about the order of decrees, about whether the decree of salvation or a living faith should be prior in God's plan. Rather, from among an infinity of possible worlds God chose the best, having considered everything contained in them. Therefore, in truth, there will be only a single divine decree concerning the existence of such a series of things, and since certain evils are included in the best series of things, they will for that reason be admitted.⁴ I believe that freedom must be saved not only from compulsion but also from necessity, yet not from infallibility or determination, for there must always be a reason why one thing rather than another happens, and there is never an indifference of perfect equilibrium. But a determining reason determines by inclining, not by necessitating, since things' happening differently does not imply a contradiction.⁵

I have noted many other areas in which I think most difficulties are resolved in a sufficiently clear manner, and as far as I can tell my opinions are not in this respect at odds with the decrees of your church, or with those most pleasing to your order. Of course, I have less love for those doctrines under which divine goodness can be seen to suffer, though in other ways I admire Augustine, Arnauld, and Quesnel. Thus, I hold out hope of some applause even from your order. At the moment I am engaged in sorting out some rather confused matters.

I believe the dialogues that are a sequel to those of the *Comte de Gabalis* were published in Holland.⁶

I do not reject the art of chronology, or rather the art of arithmetic, since

cum usum insignem ad Historiam discendam aliaque memoriae objecta numeris designata praestare possit, velut capita Bibliorum, titulos juris.

Distichon cuius meministi tale est, ut eo chartam inquinari haud velim, minus etiam oculos meos. Viros graves a talibus abhorrrere par est, ad stivam et haram relegandis. At Jacobi Boschii (unde quaedam exhibes) carmen placet de arte Symbolica, cuius alia legere non memini. Stylus ejus videtur accedere ad artem poeticam Horatii.

Quod superest vale et fave. Dabam Hanoverae 12 Septembr. 1708.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. R. P. Dezii librum apud Argentoratenses de religionis controversiis olim editum tunc cum prodiit inspicere memini, mittente D. Landgravio Ernesto. Placuit autoris ingenium et moderatio, et nunc gratum est talem virum provehi.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

P[ax] C[hristi]

Mitto litteras Orbani quas ante triduum accepi. Legi cum voluptate postremas tuas litteras quibus de variis Theologiae controversiis sententiam tuam aperis. Inde natae sunt annotatiunculae sequentes, quas ut aequi bonique consulas rogo.

Censeo in non regeneratis actum omnem sine adjutorio gratiae factum hoc solum sensu dici ab Augustino peccaminosum, quod cum homo ad aeternae vitae finem elevatus omnes actus suos eo dirigere debeat, hoc ipso per se loquendo contra obligationem suam agat ille quidem, si id non faciat. Sed tamen non ideo semper actus qui ad finem illum non refertur agenti etiam non regenerato si gratia omni destituatur imputari ad culpam dementumve potest uti Jansenius contendit. Caeterum nec Augustinus negat non regeneratos gratia adjuvari et elicere quandoque actus vere bonos et supernaturales, saltem inchoatos, licet ad gratiam justificationis non perveniant quales in actis Apostolorum Cornelius Centurio ante fidem a Petro praedicatam habuisse censetur.

representing designated objects by numbers can be of great use for studying history and other things such as chapters of the Bible and legal statutes.

The couplet of which you reminded me is such that I should scarcely want a sheet of paper, much less my eyes, defiled by it.⁷ It is right that serious men have shrunk from such things, which should be left to the sty and the plow. But the poem of Jacob Bosch on the art of symbolism (from which you quote some verses) is pleasing; I do not remember having read anything else by him. His style appears to come close to Horace's *Ars poetica*.⁸

For the rest, farewell and think kindly of me. From Hanover, 12 September 1708.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I remember examining Father Dez's book on religious controversies at the time it was published in Strasbourg, before sending it on to the Landgrave Ernst. I was pleased by the author's intelligence and moderation, and now I am thankful that such a man has been advanced.⁹

22. Des Bosses to Leibniz¹

[Hildesheim, 5 October 1708]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

I am sending on the letter I received from Orban three days ago.² I read with pleasure your latest letter in which you lay out your views on various theological controversies. They have prompted the following brief remarks, which I ask you to regard fairly and sympathetically.

I believe that in an unregenerate person every act performed without the aid of grace is said by Augustine to be tainted with sin in this sense alone, that since man has been elevated to the end of eternal life, he ought to direct all his actions toward this; strictly speaking, if he does not do that, then by this very fact he acts contrary to his obligation. Nevertheless, it does not follow from this that every act that is not referred to that end, even if every grace is missing in an unregenerate agent, can be judged blameworthy or an act of madness, as Jansen contends. Moreover, Augustine does not deny that the unregenerate are aided by grace and sometimes choose acts that are truly good and supernatural, at least imperfectly, although they do not achieve the grace of justification, such as Cornelius the centurion is believed to have had in the face of the faith proclaimed by Peter, in the Acts of the Apostles.³

Quae de gratia per se victrice, de voluntate antecedente deque electione gratuita subdis cum communi nostrorum doctrinae prorsus consentiant, iis immorari non lubet.

Ordinem decretorum rejiciunt multi etiam e nostris Theologis insignes, interque reliquos Martinus de Esparza. Ajuntque Deum unico virtualiter indivisibili decreto quidquid libere statuit, statuisse. Oppositam tamen sententiam inter alios acriter defendit Joannes Baptista Gormaz nuper in Collegio nostro Romano Theologiae Professor in cursu suo Theologico recens edito Augustae Vindelicorum. Mihi tua sententia jamdudum arrisit, et de Deo praeclarius sentire visa est. Antonius Perez noster, de quo alias scripsisse memini, ingeniose tuetur Deum ex infinitis mundis possibilibus optimum elegisse. Et cum ei objicitur mundum optimum, uti et creaturam perfectissimam implicare contradictionem, respondet Deum semper optimum eligere quandocumque ex tali electione non sequitur processus in infinitum quod fieret si statueretur Deum, perfectissimum E.G. Angelum condendum elegisse. Id responsum an meditatis tuis consonet scire aveo.

Cum libertatem a coactione et necessitate, non tamen ab infallibilitate et determinatione eximendam ais, hoc, opinor, innuis ex duobus motivis contrariis voluntati propositis alterum semper altero fortius esse, non quidem invincibile sed tamen invictum, id est cui resisti possit licet nunquam ei resistatur; quam sententiam multi insignes Theologi S. Augustino tribuunt, in eaque fundari putant discrepantiam, si quae est, Augustiniani Systematis in materia gratiae a Systemate aliorum Patrum ac nominatim Chrysostomi uti videre est in actis Trivultianis mense Julio Anni 1704 pagina 47 editionis Batavae. Eam porro sententiam Vasquez etiam noster, imo et Bellarminus ipse tueri videntur.

Distychon eo tantum consilio adductum est ut probaret quantopere nobis semper stomachum moverint foeda Rempii carmina, contra quam ipse jactavit in nuperis scriptis. Fateor satius fore camarinam illam non movere.

Jacobus Boschius cujus fragmentum probas, exemplo Horatii carmen de arte symbolica (de l'art des devises) edidit ante annos circiter octo, quod reperitur initio Symbolographiae ejusdem auctoris quae complectitur aliquot millia selectissimorum symbolorum heroicorum aeri incisorum Augustae Vindelicorum. Praemisit autor dedicationem Panegyricam ad Serenissimum Carolum tunc Archiducem nunc Regem Hispaniae, quae legi meretur.

There is no need to linger over the things you add concerning grace victorious by itself, antecedent will, and gratuitous election, for they all agree fully with our general doctrine.

Many of our distinguished theologians, among them Martín de Esparza,⁴ also reject an order of decrees. They say that God has chosen whatever he freely chooses by a unique and virtually indivisible decree. Yet the opposite view is fiercely defended by, among others, the newly appointed professor of theology at our Collegio Romano, Juan Batista Gormaz, in his theology course, which was recently published in Augsburg.⁵ Your position has long pleased me, and has seemed to offer a more admirable understanding of God. Our Antonio Perez, about whom I recall having written on another occasion, ingeniously maintains that God has chosen the best from among an infinity of possible worlds, and when it is objected to him that the notion of the best world, like that of the most perfect creature, implies a contradiction, he responds that God always chooses the best, whenever such a choice does not entail an infinite regress, as would occur were it thought that God has decided that there should be created, for example, the most perfect angel.⁶ I am eager to know whether this response is consistent with your views.

When you say that freedom must be saved from compulsion and necessity, yet not from infallibility and determination, I imagine you mean that of two contrary motives assumed in the will, one is always stronger than the other—not indeed unconquerable, but still unconquered; that is, it could be resisted, yet it never is resisted. Many distinguished theologians attribute this view to St. Augustine, and they think that it forms the basis of the difference, if there is one, on the subject of grace between the Augustinian system and the system of other Church Fathers, and especially Chrysostom,⁷ as discussed in the *Mémoires de Trévoux* for the month of June 1704, page 47, in the Dutch edition. Moreover, our Vasquez,⁸ and even Bellarmine⁹ himself, also seem to defend this view.

The couplet was offered with the intention only of proving how much Rempius's loathsome poems always offend us, contrary to what he himself has boasted in recent writings. I acknowledge that it would be better if that little poem did not offend.¹⁰

Jacob Bosch, of whose fragment you did approve, published a poem in the style of Horace on the symbolic art ("the art of devices") about eight years ago. It is found at the beginning in the same author's *Symbolographia*, which includes several thousand of the choicest heroic symbols engraved in copper in Augsburg. The author prefaced it with an encomium to the most serene Charles, then archduke, now king of Spain, that is worth reading.

Theodorus Eleutherius Autor Historiae Apologeticae de Auxiliis contra le Blanc de quo alias quaerebas est P. Livinus de Meyer Flandro-belga. Liberius Gratianus autor duarum dissertationum de Mente Concilii Tridentini circa Praedeterminationem physicam est Pater Liberius de Fregere etiam Belga. Antoninus Reginaldus ejus Antagonista est Dominicanus, ni fallor, Tholosanus. Roma recens ad me scripsit R.P. Ptolemaeus Patrem Joannem Baptistam Salernum e Societate nostra virum doctum, et ut literis alias ad me datis apparet perquam humanum ex Urbe in Germaniam profectum esse, eumque cupit Ptolemaeus per me tibi aliquando innotescere quod indicio est eum has quoque regiones lustraturum. Iter meum Belgicum non processit. Expecto avide promissum opus tuum. Vale vir illusterrime. Dabam Hildesiae 5 Octobris 1708.

Illustrissimae Dominationi tuae

Devotissimus

Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Admodum Reverende Pater

Fautor Honoratissime

Gratias ago pro Orbanianis curatis. Sed magis etiam quod indicasti ex vestris viros doctos et ingeniosos qui meis sentiis conspirare videntur. Meae certe ita cohaerent inter se, ut nullus annulus salva catena avelli possit. Ex ipsa consideratione Mundorum possibilium et Electione Dei consequitur, eum et optimum elegerisse, et uno decreto cujus scilicet objectum est Mundus electus. Mundi autem nomine intelligo totam seriem rerum in aeternum procedentem nempe a parte posteriore seu in futurum; quae non est creatura sed aliquod infinitum et quasi aggregatum. Creaturam autem aliquam perfectissimam non dari posse concedo.

Martini Esparsae et Antonii Perezii vestrorum quaedam vidi olim adolescens, et ingeniosa deprehendi. Sed nunc post tantum temporis intervalum non satis memini, quatenus illa scripta fuerint. Memini et me videre olim quaedam Scholastica Sfortiae Pallavicini, tandem Cardinalis, quae mihi profunda et ingeniosa videbantur, etsi interdum paulo perplexiora.

Theodorus Eleutherius, about whom you once asked, the author of the apologetic history concerning aids of grace against Le Blanc, is Father Liéven de Meyere, a Flemish Belgian.¹¹ Liberius Gratianus, the author of two discourses on the opinion of the Council of Trent concerning physical predetermination, is Father Liberius de Feregere, also a Belgian. Antonius Reginaldus, his antagonist, is a Dominican named (unless I am mistaken) Tholosanus.¹² Reverend Father Tolomei recently wrote me from Rome that Father Giambattista Salerno of our society, a learned man and, as appears from another letter written to me, an extremely cultured one, has set out from Rome for Germany.¹³ Tolomei desires that at some point he be introduced to you through me, which indicates that he will be traveling through this area as well. My trip to Belgium has been postponed. I avidly await your promised work. Farewell, most distinguished Sir. From Hildesheim, 5 October 1708.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, S.J.

23. Leibniz to Des Bosses¹

[Hanover, mid-October 1708]

Most Reverend Father, Most Honored Supporter,

Thank you for the care you have taken on behalf of my correspondence with Orban. I am even more grateful, though, that you have indicated those learned and able members of your order who seem to agree with my views. My views certainly are connected with each other in such a way that no link can be removed without the chain's being broken. From the very consideration of possible worlds and God's choice, it follows both that he has chosen the best and that he has chosen it with one decree, whose object, obviously, is the chosen world. But by the term "world," I understand the entire series of things proceeding to eternity, that is, with respect to what is later or in the future, which is not a creature,² but something infinite and like an aggregate. I concede, however, that there cannot be a most perfect creature.

Long ago as a youth I looked at some things by your Martín Esparza and Antonio Perez, and found them quite clever. But now, after the passage of so much time, I do not remember well enough what those writings were. I recall also that I once looked at some Scholastic writings of Sforza Pallavicino, who in the end became a cardinal, which seemed to me profound and clever, though in places a little more obscure.³ I also remember

Memini etiam lustrare librum P. Derkennis de Deo, in quo libro non vulgare ingenium emicare videbatur. R. P. Salernum noscere pergratum erit. Cogito quaedam de sententiis meis mox perscribere ad R. P. Ptolemaeum, ut ipsius quoque iudicio fruar.

Scriptores populariter loquentes non raro infallibiliter determinatum cum necessario proprie dicto confundunt, inde fit ut aliquando durius loquantur quam sentiant.

Pergrata sunt vera nomina virorum doctorum qui nuper controversias in Belgio Galliaque circa libertatem et gratiam tractavere. Rogo ut Bonartis vestri meminisse velis, quo verum ejus nomen ex patribus Anglis Leodii aut in Belgio versantibus discamus. Meretur profecto vir doctus et ingeniosus ut memoria ejus non intercidat.

Quod superest vale et fave. Dabam Hanoverae Octobr. 1708.

Deditissimus

G. G. Leibnitius

P.S. Memini vestrum Franciscum de Lanis alicubi uti inter medios Aristotelis interpretes nullum Thomae Aquinati, ita inter recentiores nullum Sylvestro Mauro ex vestra Societate praeferre: itaque quis ille et quae ejus scripta discere optem.

De virtutibus aut bonis Actibus paganorum ita sentio: Multas eorum quae ad Summam Bonum non diriguntur actiones nihilominus formaliter ut sic dicam bonas et innocuas esse; ita tamen ut omnes sint culpaе cujusdam tinctura sed virtuali tantum ratione infectae: Eo plane sensu quo intentionem virtutem tribuitis sacerdoti consecranti, etsi in momento ipso consecrationis forte alia cogitet; et quomodo vester Fridericus Spee elegantissimo libello modum docuit indesinenter laudandi Deum; si nempe semel, serio ac fortiter huc dirigatur animi intentio, ut omnia imposterum, aut etiam quaedam peculiariter in hoc destinata, decernamus agere ad gloriam Dei, aut reddere significativa divinae laudis. Atque haec ut ita dicam protestatio data occasione subinde pari animi firmitate expresse repetatur. Nempe philosophi alicujus vel Herois veteris Ethnici actio poterit esse tam bona, ut quae ipsi insunt formaliter, ea omnia sine culpa ulla esse possint in homine Christiano quam maxime pio. Sed hoc deerit virtuale, sive si magis intentionale et imputativum quod Ethnicus ille non antea direxit intentionem suam in Summum Bonum caeteraque huc referre decrevit, Christianus vero vere pius hoc fecit. Itaque ut alias quasdam ac-

examining Father Derken's book on God, which seemed to project a rare intelligence.⁴ It will be pleasing to make the acquaintance of the Reverend Father Salerno. I think I shall soon write at length about some of my views to the Reverend Father Tolomei, so that I may also enjoy his judgment.

Writers speaking popularly often confound "infallibly determined" with "necessarily" in the strict sense, with the result that sometimes they speak more harshly than they think.⁵

I was pleased to receive the true names of the learned men who have engaged in the recent disputes in Belgium and France concerning freedom and grace. I ask that you try to keep in mind Bonart from your order, so that we may learn his true name from the English fathers at Liège or in Belgium. A learned and talented man certainly deserves not to be forgotten.

For the rest, farewell and think kindly of me. From Hanover, October 1708.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I recall that your Francisco de Lana somewhere ranks Thomas Aquinas first among all medieval interpreters of Aristotle, just as he ranks Silvestro Mauro of your order first among all the moderns. I should like to learn who the latter is and what he has written.⁶

Concerning the virtues and good actions of pagans, I hold the following. Many of those actions that are not directed toward the highest good are nonetheless formally, so to speak, good and innocent, yet in such a way that they are all imbued with the taint of a certain fault, though only in a virtual manner, just as a virtual intention is attributed to a priest in the act of consecration, even if at the very moment of consecration he perhaps is thinking of other things. In the same way, Friedrich Spee of your order, in his most elegant little book, taught the method of praising God ceaselessly, namely, if at one time the intention of the mind is directed seriously and forcefully to this end, that we resolve either to do everything that befalls us for the glory of God, even certain things specifically determined to this end, or to render signs of divine praise.⁷ Moreover, this profession, as it were, is to be clearly repeated with an equal firmness of mind whenever the opportunity arises. Doubtless the action of some ancient pagan philosopher or hero could be so good that everything that is in it formally could be in a Christian person of the greatest possible piety without any fault. Yet the virtual or, if you prefer, intentional or imputed factor will be missing, because the pagan has not previously directed his intention to the supreme good and has not resolved to refer all his other actions toward this end, whereas the truly pious Christian has done this. Therefore, just as in

tiones intentio virtualis commendat aut reddit efficaces. Ita hic privatio intentionis debitae inficit actiones et vituperabiles reddit. Quantus tamen sit is gradus culpae vel certe imperfectionis, ex gradu malitiae vel culpae et vincibilitate vel erroris vel ignorantiae aestimari debet: et quatenus ei poena debeatur divino iudicio relinquendum est.

Haec adjeci quod literas jam scriptas mittere distulissem, ubi discessum Tuum ex Dno. D. Behrensio intellexi, cui eas destino, ejusque iudicio relinquo servandas in reditum Tuum, an Tibi transmittendas censeat.

Des Bosses to Leibniz

Illustrissime vir, Patrone colendissime

P[ax] C[hristi]

Statim atque litteras tuas expectatissimas accepi, scripsi ad notum Typographum Leodiensem, qui sane conditionem quam proponis non recusabit, si sapit, et compendii sui satagit. Itaque nunc responsum ejus expecto quod ubi accepero, confestim ad te perscribam. Quod ipsum tibi significandum interea duxi ne nescires. Ne pagina vacet, addo dubitationem philosophicam ortam inter relegendum litteras tuas olim ad me scriptas.

Juxta te nulla Entelechia destruitur, et omnis materiam *primam* propriam et inseparabilem habet. Materia vero omnis statim ab initio mundi condita est, ergo et omnes Entelechias cum materia statim ab initio creatas esse necesse fuerit, quod de animabus humanis dici nequit, imo nec de aliis Entelechiis multis quas efficacia benedictionis divinae quarto demum aut quinto die creationis productas esse contendis in dissertatione contra Sturmium. Nec dici posse videtur quod materia prima prius condita postmodum suo tempore animam humanam, aut Entelechiam hujusmodi ab initio non creatam accipiat, nam antequam anima humana crearetur, materia ejus propria postea futura, extabat utique, et habebat aliquam Entelechiam, nam sine principio unitatis existere non poterat. Vel ergo postquam anima creata fuit, materia prima retinet priorem vel non. Si non retinet, prior destruitur; si retinet jam eadem materia prima habebit duas

other cases the virtual intention commends certain actions and renders them efficacious, so here the lack of the appropriate intention corrupts actions and renders them blameworthy. But the magnitude of this fault, or at least imperfection, should be estimated from the degree of badness or fault, and by the unavoidability of either the error or the ignorance. And it must be left to divine judgment to determine to what extent punishment is owed to it.

I added these lines because I delayed sending the letter I had already written when I learned you had left Mr. Behrens, to whom I was intending to send it. I leave it to him to decide whether it should be kept until you return, or whether it should be sent on to you.

24. Des Bosses to Leibniz¹

[Hildesheim, 14 February 1709]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

As soon as I received your much-anticipated letter, I wrote to the Liège printer I mentioned, who certainly will not object to the condition you propose, provided he is sensible and is satisfied with his profit. And so, I now await his reply, and when I receive it, I shall write to you immediately with the details, so that you are not left in the dark about what I have arranged to have published in the meantime on your behalf.² Not to leave the page empty, I add a philosophical objection that arose in the course of rereading a letter you wrote to me some time ago.³

According to you, no entelechy is destroyed, and each has its own inseparable *primary* matter. But all matter was produced at the very beginning of the world; therefore, it was also necessary that all entelechies were created with matter at the very beginning. This cannot be said about human souls, nor indeed about many other entelechies, which, in your essay against Sturm, you argue were produced through the efficacy of the divine blessing on only the fourth or fifth day of creation.⁴ It seems that it cannot be said that primary matter was produced first, with the human soul following in its own time, or that it receives an uncreated entelechy of this sort from the beginning; for before the human soul was created, the matter that was later to be its own certainly existed, and it had some entelechy, for without a principle of unity it could not have existed. Therefore after the soul has been created, either the primary matter retains the previous entelechy or it does not. If it does not retain it, the previous entelechy is destroyed; if it does retain it, then the same primary matter will have two en-

Entelechias sibi adaequatas, adeoque erit animae humanae propria, et non erit propria, etc. Loquor ubique de materia prima, τῷ δυνάμικῳ πρώτῳ, παθητικῳ, πρώτῳ ὑποκειμένῳ.

Dominus Behrensium plurimam verbis suis salutem reddere me jubet. Mitto has litteras via Brunsvigensi si aliam commodiorem nosti, peto ut suggeras. Vale vir illustrissime et porro jube. Dabam Hildesii 14 Februarii 1709.

Illustrissimae Dominationi tuae

Devotissimus

Bartholomaeus Des Bosses

P.S. Rdum Patrem Salernum, cum Regem Augustum quem quaerebat in Saxonia non reperisset, Romam pridem rediisse jam audiveris.

Leibniz to Des Bosses

Admodum Revende Pater, Fautor Honoratissime

Domum ante paucas dies redux, nolui responsionem ad gratissimas Tuas literas differre. Multum sane Tibi debeo, quod rerum mearum sagis, et cum Typographo Leodiensi agere voluisti.

Quod dubitationes Tuas attinet, sane subtiles et Te dignas, arbitror Entelechias naturaliter oriri non posse, atque adeo aut initio rerum fuisse creatas, aut postea creari. Porro Entelechia nova creari potest, etsi nulla nova pars Massae creetur; quia etsi massa jam habeat ubique unitates, tamen novas semper capit, pluribus aliis dominantes. Ut si fingas Deum ex massa quoad totum non organica, v.g. ex rudi saxo, facere corpus organicum, eique suam Animam praeficere. Tot nempe Entelechiae sunt, quot corpora organica. Caeterum Materia prima propria id est potentia passiva primitiva ab activa inseparabilis, ipsi Entelechiae (quam complet ut Monada seu substantiam completam constituat) concreatur. Ea vero massam seu phaenomenon ex monadibus resultans non auget, non magis quam punctum lineam. Vale et fave. Dabam Hanoverae 16 Martii 1709.

Deditissimus

G. G. Leibnitius

telechies adequate to it, and thus it will be proper to the human soul and not proper to it, etc. I speak throughout of primary matter, that is, the primary passive power or primary substratum.

Mr. Behrens asks that I convey his best wishes. I am sending this letter via Brunswick; if you know of another route that is more convenient, please let me know. Farewell, most distinguished Sir; I await your orders. From Hildesheim, 14 February 1709.

Your Excellency's most devoted servant,
Bartholomew Des Bosses

P.S. You may have heard already that the Reverend Father Salerno, who was not found when his Royal Highness sought him in Saxony, had already returned to Rome.

25. Leibniz to Des Bosses¹

[Hanover, 16 March 1709]

Most Reverend Father, Most Honored Supporter,

Having returned home a few days ago, I did not want to delay replying to your most welcome letter. I am extremely indebted to you for occupying yourself with my affairs and for being willing to act on my behalf with the Liège printer.

With respect to your objections, which are certainly subtle and worthy of you, I believe that entelechies cannot arise naturally, and consequently that they either were created at the beginning of the world or are created later. Furthermore, new entelechies can be created even if no new part of mass will be created; for even if a mass already contains unities everywhere, nevertheless it always acquires new ones, which are dominant with respect to many others. It is as if you were to imagine God making an organic body from a mass that as a whole is nonorganic, for example, from an unfinished stone, and placing its soul in command of it. There are indeed as many entelechies as there are organic bodies. Moreover, the primary matter proper to an entelechy, that is, the primitive passive power that is inseparable from the active power, is created with the entelechy itself (which it completes, so that it constitutes a monad or complete substance). But this does not enlarge the mass, or the phenomenon resulting from the monads, any more than a point enlarges a line. Farewell and think kindly of me. From Hanover, 16 March 1709.

Most faithfully,
G. W. Leibniz

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Ne quaeso mihi vitio verte quod ad postremas suas honoratissimas responsum ad hanc usque diem distulerim, statueram non respondere prius quam Leodiensis ille Typographus mentem mihi suam circa propositam operis tui editionem perscripsisset. Nunc cum ad binas meas jam dudum datas responsum diu frustra expectaverim; an quod infirmus ipse sit, an quod peregre profectus, an alia quacumque de causa? Taedet morarum denique nec ultra officium meum desiderari sinam. Scripsi recenter amico Leodii degenti ut hominem conveniat rogetque num litteras meas acceperit et quid statuerit responsum, ubi nactus fuero, tibi mox significabo.

Circa ea quibus dubitationi meae nuperae occurrebas unus superest scrupulus cui mederi non possum: animas brutorum non statim ab initio creatas esse censere videris, sed tunc primum cum Deus animalia produxit, eaque benedictione sua impertitus est. Igitur et materiam primam singulis animabus propriam non prius creari oportuit, utpote ab illis inseparabilem. Atqui animae brutorum creatae sunt infinitae, ergo et materia brutorum animabus propria infinita concreata fuit. Quaero nunc haec infinita materia si in cumulum unum redigatur facietne molem aliquam an non? Si faciat: ergo et dispersa molem faciet. Si congregata molem non faciat: quomodo ergo verum est, quod alias me docebas, ex solo situ partium materiae molem sive extensionem consurgere?

Intelleximus Papam post auditum Patrem Provana referentem de Rebus Chinicis nihilominus pronunciasset pro decreto Turnonii attamen necdum scimus an Ritus Chinos declaraverit esse absolute superstitiosos an vero tantum prohibuerit tanquam habentes saltem speciem superstitionis. Vale Illustrissime Vir. Dabam Hildesiae 22 Aprilis 1709.

Illustrissimae Dominationi tuae

Devotissimus

Bartholomaeus Des Bosses SJ

26. Des Bosses to Leibniz¹

[Hildesheim, 22 April 1709]

Most Distinguished Sir, Most Esteemed Patron,

I pray that you do not find fault with me for delaying until today a response to your last letter, for which I feel most honored. I had decided not to respond until the Liège printer had communicated his opinion to me concerning the proposed edition of your work. Now, since I have waited a long time in vain for a reply to the two letters I have already sent him, I wonder whether he is sick, or has gone abroad, or whether there is some other reason. Finally I am tired of the delays, and I shall no longer allow my service to be found wanting. I recently wrote to a friend living in Liège, requesting that he meet with the man and ask him whether he had received my letters and what response he had. As soon as I find out, I shall let you know at once.

Concerning the answers you provided to my recent query, there remains one difficulty that I cannot resolve. You seem to hold that the souls of beasts were not created straightaway at the beginning, but were created for the first time when God produced the animals and bestowed his blessing on them.² Therefore, the primary matter proper to individual souls also must not be created beforehand, as it is inseparable from them. Nevertheless, the created souls of beasts are infinite; therefore, the matter proper to the souls of beasts, which was created with them, is also infinite. I ask now whether this infinite matter, if it is gathered in one pile, will form some mass or not. If it does, then the dispersed matter also will form a mass. If the congregated matter does not form a mass, then how is it true, as you informed me elsewhere, that the mass or extension of matter arises solely from the arrangement of parts?

We have learned that after hearing Father Provana's report on Chinese affairs, the pope nonetheless spoke out on behalf of the decree of Tournon. But we do not yet know whether he declared the Chinese rites to be entirely superstitious, or whether he only prohibited them as having at least the appearance of superstition.³ Farewell, most distinguished Sir. From Hildesheim, 22 April 1709.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, S.J.

Leibniz to Des Bosses

Admodum Reverende Pater Fautor Honoratissime

Duo sunt in Bibliopolis quae eos ambiguos reddere solent: unum lucri cupiditas, alterum ignorantia. Ita nesciunt quid eligere debeant, nec satis fidunt eruditis, quia putant eos magis intelligere quid sit doctum, quam quid sit vendibile.

Nuper curavi in mundum redigi dissertationem olim a me conscriptam, cum res seculi noni examinare, et in chronologicis disquisitionibus verserer. Titulum ei feci: *Flores sparsi in Tumulum Johanna Papissae*; ubi fabulam Papissae partim novis argumentis, partim veteribus confirmatis explodo, et chronologiam ejus temporis, passim obscuratam in clara luce colloco, et effugiis Friderici Spanheimii, Leidensis Theologi novissimis libello in Batavis ante aliquot annos edito contentis respondeo. Nonnulla etiam non observata inspergo, nam et librum quendam Magicum Papissae attributum, nondumquidem editum detexi, aliaque curiositate lectoris non indigna ex Manuscriptis erui.

Hic libellus fortasse magis placeret Typographo vestro Leodiensi: sed ego libenter uni concederem utrumque tam illum de Papissa Latinum, quam Baylio oppositum Gallicum.

Nunc ad quaestionem philosophicam venio. Utrum Animae Brutorum quarta demum die sint creatae, non definio: saltem innumeras Entelechias statim ab initio creatas fuisse oportet. Sed volui tantum explicare quomodo novae animae existere possent etsi nulla creetur nova pars materiae. Et hoc ni fallor nupera Epistola praestitit. Per Materiam autem hic intelligo Massam seu Materiam secundam, ubi est extensio cum resistantia. Nec recordor me (sumendo Materiam hoc sensu) ulli animae assignasse materiam propriam imo omnis pars corporis organici alias entelechias continet. Equidem verum est animam non transire de uno corpore organico in aliud sed semper in eodem corpore organico manere, ne morte quidem hanc legem violante. Verum considerandum est, hoc ipsum corpus organicum idem manere ut navis Thesei, seu ut flumen, id est esse in fluxu perpetuo, nec fortasse ullam materiae portionem assignari posse, quae ei-dem semper animali vel animae propria maneat.

Si rem scrupulosius consideres, fortasse tentabis dicere, animae saltem certum assignari posse punctum. Sed punctum non est certa pars materiae, nec infinita puncta in unum collecta extensionem facerent. Quod sic

27. Leibniz to Des Bosses¹

[Hanover, 30 April 1709]

Most Reverend Father, Most Honored Supporter,

Two things tend to make booksellers hesitate: one is their desire for profit, the other is their ignorance. Thus, they do not know what they should select, and they do not have sufficient confidence in the learned, since they believe the latter have a better appreciation for what is scholarly than for what is marketable.

Recently I undertook to prepare for publication a study I wrote some time ago while investigating the affairs of the ninth century and occupied with chronological inquiries. I gave it the title *Flowers Scattered on the Grave of the Popess Joan*.² In it I explode the myth of the popess, partly through new arguments and partly by strengthening old ones. I place the generally obscure chronology of her time in a clear light and respond to the Leiden theologian Friedrich Spanheim's latest flights of fancy, contained in a pamphlet published several years ago in Holland.³ I even throw in a few unnoticed facts, for I also uncovered a book on magic, to this day unpublished, attributed to the popess, and I rescued other things from the manuscripts that are not unworthy of a reader's curiosity.

Perhaps this little book would be more pleasing to your Liège printer, but I would gladly consign both—the Latin one concerning the popess, as well as the French one opposing Bayle—to one publisher.

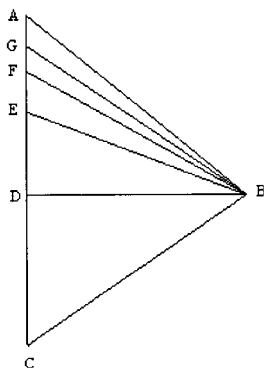
I come now to your philosophical question. I do not state definitively that the souls of beasts were created only on the fourth day; in any case, innumerable entelechies must have been created from the very beginning. Rather, I wanted only to explain how new souls could exist, even if no new part of matter is created. And this, unless I am mistaken, was shown in my last letter. But by "matter" here, I understand mass or secondary matter, in which there is extension together with resistance. Taking matter in this sense, I do not recall assigning to any soul a matter proper to it; rather, every part of an organic body contains other entelechies. Of course, it is true that a soul does not pass from one organic body into another, but always remains in the same organic body, with not even death violating this law. Still, it must be kept in mind that this organic body itself remains the same in the way that the ship of Theseus or a river does; that is, it is in perpetual flux, and perhaps no portion of matter can be designated that always remains proper to the same animal or soul.

If you examine the issue more carefully, perhaps you will try to say that a definite point at least can be assigned to a soul. But a point is not a definite part of matter, and an infinity of points gathered into one would not

probo:^{L1} Sume triangulum ABC ejus latus AC biseca in D, et AD in E et AE in F, et AF in G, et ita porro. Pone ita factum esse in infinitum. Habemus triangu-
la infinita BCD, BDE, BEF, BFG, etc. Horum quodlibet (dando ipsis crassitiem ut fiant corpora vel ab initio sumendo triangulum crassum id est pyramidem) potest existere separatim. Et ita unumquodque suum habebit proprium apicem. Finge deinde omnia componi inter se, ut fiat pyramidis vel triangulum totale ABC; patet omnes illos apices infinitos hoc modo compositos non facere nisi unum apicem communem B. Quod si nolis adhibere triangu-
la infinita saltem vides hoc verum esse generaliter de triangulis quocumque. Extensio quidem exsurgit ex situ, sed addit situi continuitatem. Puncta situm habent, continuitatem non habent nec componunt, nec per se stare possunt. Itaque nihil impedit, infinita continue puncta nasci et interire (vel saltem coincidere aut extra se invicem poni) sine augmento et diminutione materiae et extensionis cum non sint nisi ejus modificationes; non partes nempe, sed terminationes.

Interim non puto convenire ut animas tanquam in punctis consideremus. Fortasse aliquis diceret, eas non esse in loco nisi per operationem, nempe loquendo secundum vetus systema influxus; vel potius, secundum novum systema Harmoniae praestabilitae esse in loco per correspon-
sionem, atque ita esse in toto corpore organico quod animant. Non nego interim Unionem quandam Realem Metaphysicam inter Animam et Corpus Organicum, (ut Turneminio etiam respondi) secundum quam dici possit Animam vere esse in corpore. Sed quia ea res ex phaenomenis explicari

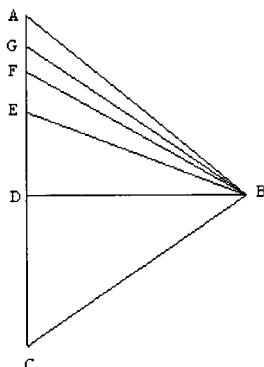
L1. IN THE MARGIN:



make extension. I prove this as follows:^{L1} Take a triangle ABC, whose side AC is bisected at D, and AD at E, and AE at F, and AF at G, and so on. Suppose that this is done to infinity. We have an infinity of triangles BCD, BDE, BEF, BFG, etc. Any of these could exist separately (by giving them a solidity so that they become bodies, or assuming from the outset a solid triangle, that is, a pyramid). Thus, each will have its own vertex. Imagine then that they are all combined together, so that the whole pyramid or triangle ABC is formed; it is obvious that all those infinite vertices combined in this way form only one common vertex B. And if you do not want to make use of infinite triangles, you at least see that this is true in general for any number of triangles. Extension indeed arises from situation, but it adds continuity to situation. Points have situation, but they neither have nor compose continuity, and they cannot subsist by themselves. Thus nothing prevents an infinity of points from continually arising and perishing (or at least coinciding or being placed outside one another) without an increase or decrease of matter and extension, since points are only modifications of extension—not parts, of course, but boundaries.

Nevertheless, I do not think it appropriate to regard souls as though in points. Perhaps someone might say that souls are not in a place except through operation, speaking here according to the old system of influx; or rather, according to the new system of preestablished harmony, that they are in a place through correspondence, and that in this way they are in the whole organic body that they animate. On the other hand, I do not deny a certain real metaphysical union between the soul and an organic body (as I also responded to Tournemine) according to which it can be said that the

L1. IN THE MARGIN:



non potest, nec quicquam in iis variat: ideo in quo formaliter consistat, ultra distincte explicare non possum. Sufficit correspondenti esse alligatam. Vides autem me hic loqui hactenus non de Unione Entelechiaei seu principii activi cum Materia prima seu potentia passiva, sed de Unione Animae seu ipsius Monadis (ex utroque principio resultantis) cum massa seu cum aliis Monadibus.

At inquires quid de ipsa Materia prima Animae propria dicemus. Respondeo eam utique animae concreari seu Monadem creari totam. Ergone sic Materia prima augetur et minuitur? Fateor cum non sit nisi potentia passiva primitiva. Ergo inquires et Massa augetur. Concedo augeri numerum Monadum, quarum resultatum utique est Massa, sed non extensionem et resistantiam aut phaenomena, non magis quam cum nova puncta oriuntur. Deus infinitas Monades novas creare posset, non augendo Massam si ad novae Monadis corpus organicum non nisi veteres Monades adhiberet. Massa est phaenomenon reale, nec in phaenomenis (exceptis iis quae apparent ipsi novae monadi utique nove) quicquam mutatur ob novae Monadis ortum, nisi forte miraculo. Nam putandum est Monades antiquas jam ab initio ita ordinatas fuisse a Deo, cum eas crearet, ut phaenomena earum responderent aliquando Monadi adhuc creandae; nisi malimus Deum caeteras omnes Monades miraculo immutare, cum novam creat, ut eas novae accomodet quod minus verisimile est.

Caeterum haec omnia huc tendunt: possibile esse, ut Deus creet novas Monades. Sed non tamen definitio a Deo novas Monades creari. Imo puto defendi posse, et probabilius esse contrarium; adeoque praeeexistentiam Monadum. Et pro creatione absoluta Animae rationalis defendi posset Transcreatio Animae non rationalis in rationalem quod fieret addito miraculose gradu essentiali perfectionis. Id etiam defendo in dissertatione Anti-Bayliana, tanquam mihi probabilius visum creatione omnimoda, et verius traduce.

Mirarer Curiam Romanam de rebus Sinicis nondum satis perspectis cum Ecclesiae nascentis periculo pronuntiare. Vellem nosse an verum sit Cardinalem Turnonium a Lusitanis in urbe Macao fuisse detentum, et an

soul is truly in the body. But because such a thing cannot be explained in terms of the phenomena and does not change anything in them, I cannot explain any more distinctly in what this union formally consists. It is enough that it is tied to the correspondence.⁴ You realize, though, that until now I have been speaking here not of the union of an entelechy or active principle with primary matter or passive power, but of the union of the soul or of the monad itself (which results from both principles) with mass, or with other monads.

But what, you ask, will we say about the primary matter itself that is proper to the soul? I respond that this certainly is created with the soul, or that the complete monad is created. In that case, is primary matter not increased or decreased? I acknowledge that it is, since it is nothing but a primitive passive power. Then, you ask, is mass also increased? I concede that the number of monads, whose result assuredly is mass, is increased, but not extension and resistance, or phenomena, any more than when new points arise. God could create infinitely many new monads without increasing mass, if he used nothing but old monads for the organic body of a new monad. Mass is a real phenomenon, and nothing is changed in the phenomena (with the obvious exception of those things that newly appear to the new monad itself) on account of the creation of a new monad, unless perhaps by a miracle. For we must hold that, because God created them, the original monads had already from the outset been ordered by him in such a way that their phenomena would correspond at any time with those of a monad yet to be created, unless we should prefer that when God creates a new monad he changes all the other monads miraculously, so that he accommodates them to the new monad, something that is less probable.

Now, all these things tend to this: it is possible that God may create new monads. Nevertheless, I still do not state definitively that new monads are created by God. Indeed, I think the contrary can be defended and that it is more probable, and that to this extent also the preexistence of monads can be defended. In place of the absolute creation of a rational soul, there could be defended the transcreation of a nonrational soul into a rational soul, which would occur through the miraculous addition of an essential degree of perfection. I also defend this in the work against Bayle, as it seemed to me more probable than any sort of creation and more reasonable than transduction.⁵

I am surprised that the Roman curia has spoken out on Chinese affairs that are not yet sufficiently understood, given the danger to the growing Church. I should like to know whether Cardinal Tournon was detained in

cum P. Provana venerit Legatus Monarchae Sinici, ut habebant Novellae vulgares. Finge multos Sinenses vere esse idololatrias vel etiam Atheos. Sufficit publica illic auctoritate alium sensum assignari ritibus; qua ratione via etiam aperitur ipsis quoque privatis errantibus ab errore liberandis. Quod superest vale et fave. Dabam Hanoverae 30 April[is] 1709.

Deditissimus

G. G. Leibniz^{L2}

Des Bosses to Leibniz

Illustrissime Domine, Patrone Colendissime

P[ax] C[hristi]

Circa Pentecosten uni e nostris Hannoveram tendenti litteras ad Te perferendas dedi, adjunctis Hartsoeckeri Conjecturis, quarum pro commodatione gratias iterum, ut par est, ago. Subinde accepi remissam a Te Causam Quenellianam cum Processu Gerberoniano. Paulo post Clarissimum Hartsoeckerum ipsum vidi beneficio Tuo. Is postquam verbis mihi Tuis salutem nunciasset, sciscitari coepit, ecquid de *Conjecturis* istis, quas mecum a te communicatas intellexerat, sentirem. Ego suspicatus quod res erat (nam initio nomen suum dissimulabat) respondi: per Elementa illa duo, quae Philosophia vulgaris non facile fortassis everteret, multa ingeniose explicata videri sed de omnibus pronunciare me non posse, tum quod in

L2. DRAFT: P.S. Ante multos annos, cum nondum satis matura esset philosophia mea, locabam Animas in punctis, et ita putabam multiplicationem animarum per Traducem explicari posse, dum ex uno puncto fieri possunt plura, ut ex apice trianguli unius per divisionem fieri possunt apices plurium triangulorum. Sed factus considerator, deprehendi non tantum ita nos in difficultates innumeras indui, sed etiam esse hic quandam, ut sic dicam μετάβασιν εἰς ἄλλο γένος. Neque animabus assignanda esse quae ad extensionem pertinent, unitatemque earum aut multitudinem sumendam non ex praedicamento quantitatis, sed ex praedicamento substantiae, id est non ex punctis, sed ex vi primitiva operandi. Operatio autem animae propria est perceptio, et unitatem percipientis facit perceptionum nexus, secundum quem sequentes ex praecedentibus derivantur.

the city of Macao by the Portuguese and whether the emissary of the emperor of China came with Father Provana, as was reported in the popular press. Suppose that many Chinese are truly idolatrous or even atheists. It is enough that a different sense be assigned to rites by the public authorities there; by that means a way is even opened for liberating the erring individuals from error. For the rest, farewell and think kindly of me. From Hanover, 30 April 1709.

Most faithfully,
G. W. Leibniz^{L2}

28. Des Bosses to Leibniz¹

[Hildesheim, 30 July 1709]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

Around Pentecost I gave a member of our order who was traveling to Hanover a letter² to be delivered to you, and included with it Hartsoeker's *Conjectures*, for the loan of which I again thank you, as is fitting.³ Immediately thereafter I received back from you *The Quesnel Case*, along with *The Trial of Gerber*.⁴ A little later, as a result of your kindness, I saw the esteemed Hartsoeker himself. After he had passed on your greetings to me, he began to ask whether I had any opinion of the *Conjectures*, which he understood you had shared with me. Having suspected what was going on (for in the beginning he was holding back his name), I replied: Through those two principles, which the common philosophy probably would not readily give up, many things seem to have been cleverly explained. But I cannot pass judgment on all of them, both because I limited myself to reading closely those things he had discussed in detail and surveyed the

L2. DRAFT: P.S. Many years ago, when my philosophy was not yet sufficiently mature, I located souls in points, and in this way I thought the multiplication of souls could be explained in terms of traduction, whereby from one point many can be made, just as from the vertex of one triangle, the vertices of many triangles can be made through division. But after further reflection, I discovered that in this way we are not only led into innumerable difficulties, but that there is also here a certain, as it were, category mistake. Those things that pertain to extension should not be attributed to souls, and their unity and multitude should not be taken from the category of quantity, but rather from the category of substance, that is, not from points, but from a primitive force of operating. But the operation proper to the soul is perception, and the nexus of perceptions, according to which subsequent perceptions are derived from previous ones, forms the unity of the perceiver.

eorum fere quae generatim disseruisset, lectione haesissem caeteris obiter solum lustratis; tum quod *Principia Physices* et *Dioptricae Conamina* ex quibus penitior Elementorum istorum elucidatio petenda videbatur, non nisi in inserta Diariis Parisiensibus Synopsi vidissem. Caeterum systema illud apud Leibnitium stare non posse. Quod postremum nec ipse diffitebatur, sed addebat gratum fore Hartsoeckero si difficultates contra systema ejus mihi vel aliis occurrentes Actis Eruditorum inserendae Lipsiam mitterentur, responso non carituras. Mihi veniebat in mentem id quod circa absolutam elementorum istorum fluiditatem duritiemque in Diario Parisiensi obmoveri a Te memineram sed Virum Clarissimum ad Herciniae fodinas properantem morari nolui. In digressu fassus est se Hartsoeckerum ipsum esse.

Scripsi ad Ptolemaeum de duabus lucubrationibus quas praelo maturas habes, nec tacui sapientissimum Tuum de re Sinica iudicium, cui tandem locum fore reor. Nam interea intelleximus mutatam aliquantum rerum illarum faciem ex quo Papa locum dedit audiendae Episcopi Ascalonensis appellationi a decreto Turnonii. Est ille Episcopus ex familia Augustiniana Vicarius alicubi in China, qui stat pro ritibus. Cum Pater Provana contentiosius aliquando diceret pro causa sua, suaviter monitus a Papa ne nimium incalesceret, reverenter reposuit Sanctissime Pater, quis non incalescat dum ardet Ecclesia? Sicque coeptum sermonem prosecutus est. Verum haec aliaque tibi magis quam nobis perspecta esse conjicio ex iis quae a R. P. Vota accepta nos docuisti.

Amicus Leodiensis cui Typographi negotium mandaveram, nihil ab eo aliud responsi tulit nisi: se editionem suscipere nolle, et hanc fuisse causam cur binis meis litteris respondere supervacuum putarit. Satis profecto inurbane. Addit tamen amicus idem se, si manuscriptum mittatur, alium Typographum, qui opus edendum suscipiat, facile reperturum. Verum cum de exemplis quae exigis ad eum nihil ante scripsissem alteris litteris ei mandavi ut eam conditionem proponeret. Insuper cum caveret ne quid in edendo opere Ecclesiae Catholicae dogmatis contrarium contineretur, hoc eum metu fidenter exsolvi, nihil dubitans te fidem meam liberaturum, ne ob praestitam qualemcumque operam apud nostros vapulem. Et alioqui cautelam istam instituto tuo necessariam esse pro tua sapientia intelligis.

rest only in passing, and because I had seen only the summary in the Paris journals of the *Principles of Physics* and *Essay on Dioptrics*, from which, it seemed, the deeper explanation of those principles must be sought. Moreover, I told him that, according to Leibniz, the system cannot be upheld. In the end, he himself did not deny this, but he added that Hartsoeker would be grateful if the difficulties I or others found with his system were submitted for publication in the *Acta eruditorum*, where they would not lack a response. It occurred to me that I had remembered something you had put forward in the *Journal des savants* concerning the absolute fluidity and hardness of those elements,⁵ but I did not want to delay the esteemed gentleman's hurrying off to the Harz mines. As he was leaving, he confessed that he himself was Hartsoeker.

I wrote to Tolomei about the two works you have ready for publication, and I did not remain silent about your most wise judgment concerning the Chinese affair, for which I believe there will be a place eventually. Meanwhile, we have learned of the somewhat altered state of those matters, from the fact that the pope consented to hear the appeal of the bishop of Ascalon against Tournon's decree. This is the bishop, from the Augustinian order, whose see is somewhere in China, who is on the side of the rites.⁶ When at one point Father Provana was speaking rather vigorously in support of his cause and was gently admonished by the pope that he should not become too heated, he responded: "Most Holy Father, who would not become heated, when the Church burns?" And with this, he carried on with the speech he had begun. But I imagine that these and other things from among those you have passed on to us, based on what you have heard from the Reverend Father Vota, are clearer to you than to us.⁷

The friend in Liège to whom I had entrusted the business of the printer reported that the only answer he got from the printer was this: he decided he did not want to undertake the edition, and this was why he thought it unnecessary to respond to my two letters. How rude indeed! Nonetheless, the same friend adds that if the manuscript is sent, he will easily find another printer, who would take on the job of publishing the work. But since I had written nothing to him earlier about the copies you require, I sent word to him in another letter that he should impose this condition. Moreover, since he was concerned that the work to be published should not contain anything opposed to the teachings of the Catholic church, I confidently freed him from this fear, not doubting in the least that you would keep my promise, so that I am not reviled within my order on account of a work with any kind of notoriety. In any case, by virtue of your wisdom, you understand that this caution is necessary for your own purposes.

Venio nunc ad philosophicas in postremam paenultimaepistolae Tuae partem animadversiones meas, quas ut aequi bonique consulas rogo.

Animas brutorum quinto demum die creatas a te statui colligebam ex Tuae *de ipsa Natura adversus Sturmium* dissertationis n°. 6 ubi per divinum mandatum: *producat terra* etc. contendis insitam esse quandam rebus efficaciam, formam, seu vim, qualis naturae nomine accipi solet *ex qua series φαινόμενων ad primi jussus effectum consequebantur*. Atque in his quidem postremis verbis, linea subductis innuere mihi videbaris ob novarum istarum Monadum exortum mutata fuisse phaenomena. Et alioqui dicendum eadem futura fuisse in natura phaenomena quamvis animantium animae creatae nunquam fuissent. Unde ergo illas creatas fuisse evinces? Ex rationibus metaphysicis, inquires: fateor; sed an ex iis solis? Quid? Nihilne physica hic poterit? Nihil sane pollent, si ad explicanda quae cernuntur phaenomena necessariae non sunt animae brutorum. Necessariae autem non erunt si nullam in phaenomenis mutationem inducunt. Certe ipse animae adeo rationali officium Formae sive Entelechia tribuis, quae utique qua talis est, non minus phaenomena propria habebit quam Formae sive entelechia reliquae.

Quod ais Animam non transire de uno corpore organico in aliud sed semper in eodem corpore organico manere *ne morte quidem intercedente*, sed corpus organicum manere idem solum ut navis Thesei vel flumen, nisi quod animae certum assignari possit punctum etc. de brutorum animabus non magnopere pugnabo; de humanis an id admittere tuto possim, equidem nescio, nec video quare. Si transcreationem tuam recte percipio, hominis anima cum sine omni materiae cujuscunque adminiculo operari possit, ab omni materia etiam prima seu πρώτῳ ὑποκειμένῳ absolvi post mortem nequeat. At quid igitur fiet ipsa materia prima sive propria quacum anima humana monadem constituebat? Dicerem satis illi de unitate provisum per Entelechiam illam ipsam cui anima humana tanquam gradus essentialis perfectionis addita fuerat. Quod si ante animae rationalis infusionem materia illa prima extare potuit sine ipsa, quid ni et post ejus jacturam? Dico si recte percipio transcreationem animae non rationalis in rationalem quam ais fieri posse addito miraculose gradu essentiali perfectionis, id est rationalitatis. Nam non voles, opinor, animam non rationalem adveniente gradu rationalitatis per transcreationem perire penitus: sed tantum, animae non rationali praeexistenti et perseveranti supervenire gradum, quem ais, essentialem perfectionis sive rationalitatis qui

I come now to my philosophical reflections on the last part of your penultimate letter, which I ask that you consider with a fair and sympathetic mind.

I inferred that you hold that the souls of beasts were not created until the fifth day from section 6 of your essay against Sturm, "On Nature Itself," where you assert that through the divine command "Let the earth bring forth," etc., there is in things a certain innate efficacy, form, or force, such as is usually understood by the word "nature," "from which the series of phenomena follow in accordance with the execution of the first command."⁸ And with these last words at least, quoted from your essay, you seem to me to suggest that as a result of the creation of those new monads, the phenomena were altered. Otherwise, we would have to say that there would have been the same phenomena in nature, even if the created souls of animals had never existed. So how will you prove that these souls were created? From metaphysical reasons, you say. I grant this; but from those reasons alone? Why? Can physics do nothing here? The metaphysical reasons do no work at all, if the souls of beasts are not necessary to explain which phenomena are perceived. But these souls will not be necessary, if they lead to no change in the phenomena. Certainly, you yourself ascribe the function of a form or entelechy even to a rational soul, which is certainly such that it will have its own phenomena no less than the rest of the forms or entelechies.

You say that the soul does not pass from one organic body into another but always remains in the same organic body, "with not even death intervening," though the organic body remains the same only in the manner of Theseus's ship or a river, unless a definite point can be assigned to the soul, etc. I shall not contest this very strongly in the case of the souls of beasts. Whether I could safely admit this about human souls, I truly do not know, but I do not see how I could. If I correctly understand your notion of transcreation, although the human soul can operate without the aid of any particular matter, it cannot be released from all matter, including primary matter or a primary substratum, after death. But what then becomes of that primary or individual matter, with which the human soul constituted a monad? I should say that its unity is sufficiently provided for by that very entelechy to which the human soul had been added as an essential degree of perfection. But if before the infusion of the rational soul that primary matter could exist without it, why not after its loss as well? I say, if I correctly understand it, that the transcreation of a nonrational soul into what you call a rational soul can occur through the miraculous addition of an essential degree of perfection, that is, of rationality. For you do not mean, I

gradus tam parum sit modus animae praeexistentis quam parum anima praeexistens erat modus materiae propriae sive corporis organici ita ut gradus ille essentialis seorsum sumptus vera sit Entelechia realissime distincta a priori illa, afficiens tamen eandem prorsus materiam primam propriam sive potentiam passivam, imo corpus idem organicum quam et quod afficiebat praeexistens anima non rationalis. Hoc ita posito variae occurrent quaestiones. Imo quare *miraculose* superaddi dicatur ille gradus? An non inde consequetur naturae conformiorem et verisimiliorem esse animarum humanarum propagationem per traducem? 2^o quomodo una eadem materia a duabus entelechiis adaequatis informari possit? Aut 3^o quomodo in homine admitti possint duae animae, quod Synodi generalis 8^{ae} act 10 Canoni 11 adversari videtur. Verum haec postrema difficultas tibi cum Gassendo aliisque communis erit. Ad quam uti et ad 2dam respondebis fortasse, animam praeexistentem et gradum illum supervenientem, licet realiter diversos, non facere tamen nisi unam animam. Sed hoc regeram: anima praeexistens etiam post factam cum gradu superveniente unionem manet vera anima, ergo a fortiori et gradus ille perfectionis superveniens, utpote dignior, vere anima erit. Ergo duae erunt animae, duae formae dominantes sive adaequatae, duae unitates.

Accedo nunc ad controversiae caput. In priori epistola mea urgebam: si monades infinitae quinto primum die creatae fuissent, fore ut vel ex illis additis moles seu massa, sive extensio cresceret, aut si non inde cresceret ex monadibus nunquam exsurgere possit extensio. Ais singulas monadas tantum addere singula puncta quae non sunt certa pars materiae, nec infinita puncta in unum collecta extensionem factura, cum puncta non sint nisi terminationes materiae, atque adeo situm quidem habere, continuitatem non item, sed nec componere nec stare per se posse. Evincis, fateor, et demonstras, puncta mathematica terminationes sive modificationes nudas esse materiae, nec ex ipsis etiam infinities repetitis exsurgere extensionem posse, denique ea continuitatem non habere nec componere, nec stare per se posse. Sed puto monadas ipsas, de quibus sermo erat, ut meras Materiae modificationes aut terminationes considerari non posse, cum potius principia sint et fundamenta massae sive extensionis, imo potius

believe, that a nonrational soul in acquiring a degree of rationality through transcreation perishes entirely, but only that what you call an essential degree of perfection or rationality makes an addition to the preexisting and enduring nonrational soul; and that this degree is as much a mode of the preexisting soul as the preexisting soul was a mode of the individual matter or organic body, just as that essential degree taken by itself is a true entelechy really distinct in every way from the prior entelechy, and yet nonetheless affecting exactly the same individual primary matter or passive power, and even the same organic body that the preexisting nonrational soul affected and in the same way. Supposing all of this, several questions arise. First, why is that degree said to be added “miraculously”? Does it not follow from this that the propagation of human souls through traduction is more in conformity with nature and more probable? Second, how could the very same matter be informed by two adequate entelechies? Or, third, how could two souls be admitted in man, a claim that seems to go against Canon 11, Act 10, of the Eighth General Synod? Indeed, this last difficulty will be common to you and Gassendi and others. You will perhaps respond to this, as to the second problem, that the preexisting soul and that additional degree, though really distinct, nevertheless make only one soul. But I shall counter with this: the preexisting soul, even after the union with the additional degree has been made, remains a true soul; therefore, *a fortiori*, that additional degree of perfection, inasmuch as it is worthier, will truly be a soul as well. Therefore, there will be two souls, two dominant or adequate forms, two unities.

I come now to the crux of the controversy. In my previous letter, I pressed the following point. If an infinity of monads was created for the first time on the fifth day, then either bulk, that is, mass, or extension, would increase as a result of the added monads; or if it did not increase from that, extension could never arise from monads. You say that individual monads add only individual points, which are not a definite part of matter; that an infinity of points gathered into one point will not produce extension, since points are only boundaries of matter; and that they indeed have situation on account of this, but not continuity; moreover that they can neither compose continuity nor subsist by themselves. I grant that you prove and demonstrate that mathematical points are mere boundaries or modifications of matter, and that extension cannot arise from even the infinite repetition of them, and finally that they neither have nor compose continuity and cannot subsist by themselves. But I think that the monads themselves, which is what we were discussing, cannot be regarded as mere modifications or boundaries of matter, since they are rather principles and

extensio juxta te est modificatio monadum seu substantiarum. Sed et monades continuitatem habent, extensio enim et continuatio ex repetitione substantiae oritur, aut velim mihi dicas quid continuitas superaddat repetitioni monadum juxta se positarum sub eadem Entelechia dominante? Monades etiam componunt, nam in eas tanquam principia tota extensio resolvitur. Denique monades etiam stare per se possunt sunt enim substantiae. Haec si ita se haberent, extensio seu quantitas continua aliquid a substantia realiter diversum, non mera substantiae modificatio erit, uti alias arguebam. Nam massa nullam materiam continet, nisi eam quae ex monadum collectione consurgit.

P. Dionysium Werlensem Capucinum virum doctum tibi quique amicum ante menses aliquot diem obiisse intellexeris. Quod superest vale, et si quid voles jube. Dabam Hildesii 30 Julii 1709.

Illustrissimae dignitati tuae

Devotissimus servus in Xto

Bartholomaeus des Bosses

P.S. Litteras tuas ad P. Janningum curavi Antverpian.

Post scriptas has litteras accipio litteras a Ptolemaeo, in quibus plurimam tibi verbis suis salutem dice jubet et grata admodum sibi fuisse cogitata tua significat: praeprimis id quod de Sinensibus ritibus censes: sed multo libentius habiturum librum a te ea de re editum titulo *Novissima Sinica*. Nempe ut Romae compertum fieret quid docti et moderati Protestantes de causa illa Sinensi sentiant. Utque ne credantur omnia Mercuriis Hollandicis qui perpetuis Satyris in Jesuitas pretium quaerunt et emptores invitant. Multum modo distineri se ait et distrahi in hac retractanda causa, sibi post aliorum parum felicem operam ab A. R. P. N. Generali commendata, modica quidem spe prosperi exitus sed multorum proborum precibus ad Deum enixis et assiduis plurimum fidit. Consilium tuum de confutandis vanis et nocuis Baylii cogitatis summopere probat. Vale iterum iterumque.

Leibniz to Des Bosses

Plurimum Reverende Pater Fautor Honoratissime

Significatum a me putabam Dn. Hartsoekeri Conjecturas ad me redisse. In eo est ut continuationes procudat vir clarissimus. In dioptricis non sper-

foundations of mass or extension; indeed, according to you, extension is rather a modification of monads or substances. But monads also have continuity, for extension and continuity arise from the repetition of substances; or else I should like you to tell me what, in your view, continuity adds to the repetition of monads placed next to each other under the same dominant entelechy. Monads also compose continuity, for extension as a whole is resolved into them as though into principles. Finally, monads can subsist by themselves, for they are substances. If this is how things are, extension or continuous quantity will be something really distinct from substance, and not a mere modification of substance, as I argued elsewhere. For mass contains no matter except that which arises from a collection of monads.

You will have heard that Father Dionysius Werl, the Capuchin, a learned man and your friend, died several months ago.⁹ For the rest, farewell, and if you should want anything, just say the word. From Hildesheim, 30 July 1709.

Your Excellency's most devoted servant in Christ,
Bartholomew Des Bosses, S.J.

P.S. I have taken care of your letter to Father Janninck in Antwerp.

After writing this letter I received a letter from Tolomei, in which he bade me greet you in his name and indicated how pleasing your views were to him, most of all your thoughts on the Chinese rites. But he would be even more pleased to have the book you published on this matter entitled *The Latest News from China*¹⁰—no doubt, so that it might become known in Rome what learned and moderate Protestants think about the Chinese situation, and so that not all opinion is formed from the reports of Dutch traders, who seek profit and entice buyers through endless ridicule of the Jesuits. He says that at the moment he is very much taken up with and frustrated by having to deal again with this affair, entrusted to him by the superior general after the insufficiently productive efforts of others. He has faith, with at least a modicum of hope, that a successful conclusion will be achieved, but his greatest faith is in the zealous and assiduous prayers to God of many good men. He strongly approves of your plan of refuting the empty and harmful thoughts of Bayle. Once again, farewell.

29. Leibniz to Des Bosses¹

[Hanover, 31 July 1709]

Most Reverend Father, Most Honored Supporter,

I thought I had indicated that Mr. Hartsoeker's *Conjectures* had been returned to me. This excellent man has it in him to produce further works; in

nenda promittit. Cur de elementis cum eo certem, ratio nulla est, praesertim cum ad Metaphysices rationes deveniendum sit, quarum illi gustum esse non puto. Praeterea nostra controversia non multum ad phaenomena faceret neque enim nostrae explicationis Analysis usque ad Elementa procedit. Typographum Leodiensem non est ut magnopere curemus. Interim multas Tibi gratias debeo. In libello nihil a me defendi puto dogmatis, quod non et vestrum aliquis tueri possit. Protestantem tamen non dissimulo.

Equidem divino Mandato: *producat terra* insita rebus efficacia indicatur; non potuit tamen non in illis fuisse ab initio creationis, etsi postea magis ad operationes disponderetur. Novas animas tunc creari necesse non erat, cum veteres suffecerint. Brutum animatum esse demonstrari sive quidem probari nequit, cum ne hoc quidem possit, alios homines non nudas machinas esse, quando in ipsorum Mentis introspicere non possumus. Sed haec sunt moraliter certa, quemadmodum aliquas esse creaturas praeter me. Etsi ergo absoluta non sit necessitas, ut omne corpus organicum sit animatum, judicandum tamen est animae occasionem a Deo non neglectam cum sapientia ejus producat quantum plurimum perfectionis potest.

Anima interne quidem sine corporum adminiculo operari potest, sed non extra. Semper tamen ejus actionibus internis externa in corporibus respondent. Equidem per miraculum a Deo anima constitui potest extra corpus, sed hoc non convenit ordini rerum. A primo passivo separata non faciet rem completam seu Monada. Si tantum major gradus additur nulla est nova animae infusio. Gradus ille essentialis seorsum subsistere non potest, neque est Entelechia, cum non sit principium actionis, sed tantum Animae Facultas. Constat inter philosophos facultatem sentiendi et ratiocinandi in nobis non facere diversas animas, sed eidem animae inesse. Unde miror Te hic haerere. Eandem materiam a duabus Entelechiis adaequate informari non est cur dicamus. Gradum novum addi Animae sensitivae congruentius putavi quam animas rationales innumeras latere in seminibus quae non perveniant ad maturitatem humanae naturae. Si quis ostendat modum naturalem exaltationis, non dicam hunc modum addi miraculose. Vides ergo haec a me dici per modum hypotheseos proferendae. Animam ex anima nasci, si id Traducem appellas, explicabile non est, et longe absum ab his qui talia concipiunt.

optics he promises things that are not to be scorned. There is no reason why I should argue with him about first principles, especially since it would have to come down to metaphysical arguments, which I do not think he relishes. Besides, our dispute would not have much relevance for the phenomena, since the analysis of our explanations does not proceed to first principles. We need not worry too much about the Liège printer. Still, I owe you many thanks. I believe that I defend nothing of dogma in my little book that could not also be defended by a member of your order; yet I do not hide the fact that I am a Protestant.

Of course the divine command "Let the earth bring forth" indicates that an efficacy has been implanted in things; nevertheless, it could have been in them from the beginning of creation, though disposed more to operations later. It was not necessary, therefore, that new souls be created, since the old ones would have sufficed. That a beast is animated cannot be demonstrated, nor even proved, since it cannot even be proved that other human beings are not mere machines, inasmuch as we cannot see into their minds. But these things are morally certain, just as it is that there are other creatures besides myself. Thus, although it is not an absolute necessity that every organic body be animated, it should nonetheless be judged that God did not neglect an opportunity for a soul, since his wisdom produces as much perfection as possible.

The soul can indeed operate internally without the aid of bodies, but not externally. Nevertheless, external things in bodies always correspond to its internal actions. Of course, through a miracle God can establish a soul without a body, but this does not agree with the order of things. Separated from primary passive [power], it will not make a complete thing or monad. If a greater degree alone is added, there is no new infusion of a soul. That essential degree cannot subsist separately, nor is it an entelechy, since it is not a principle of action, but only a faculty of the soul. It is agreed among philosophers that the faculties of sensing and reasoning do not give rise to different souls in us, but that they are in the same soul. Accordingly, I am surprised that you hold this. This is why we say that the same matter is not adequately informed by two entelechies.² I thought it more fitting that a new degree be added to a sensitive soul than that innumerable rational souls that do not achieve the perfection of human nature be hidden in spermata. If anyone presents a natural mode of elevation, I shall not say that this mode is added miraculously. You see, therefore, that I say this by way of advancing an hypothesis. If by traduction you mean a soul arising from a soul, this is not explicable, and I am far removed from those who imagine such things.³

Etsi monadum loca per modificationes seu terminationes partium spatii designentur, ipsae tamen Monades non sunt rei continuae modificationes. Massa ejusque diffusio resultat ex Monadibus, sed non spatium. Nam spatium perinde ac tempus ordo est quidam nempe (pro spatio) coexistendi, qui non actualia tantum, sed et possibilia complectitur. Unde indefinitum est quiddam, ut omne continuum cujus partes non sunt actu, sed pro arbitrio accipi possunt, aequae ut partes unitatis seu fractiones. Si aliae essent in natura rerum subdivisiones corporum organicorum in corpora organica, aliae essent Monades, alia massa, et idem foret spatium quod impleretur. Nempe spatium est continuum quoddam, sed ideale; massa est discretum, nempe multitudo actualis seu ens per aggregationem, sed ex unitatibus infinitis. In actualibus simplicia sunt anteriora aggregatis, in idealibus totum est prius parte. Hujus considerationis neglectus illum continuum labyrinthum peperit.

R. P. Dionysius Werlensis Capucinus paulo ante obitum ad me scripserat, et nescio quod videbatur moliri opus novum.

Est quidam in Batavis Typographus vel Bibliopola, qui operam suam sub praescripta conditione obtulit, videbimus quo successu. Quod superest vale et fave. Dabam Hanoverae 31 Jul. 1709.

Deditissimus

G. G. Leibnitius

P.S. Novissima mea Sinica olim cum prodire Romam missa sunt, et credo, per Dom. Magliabecchium ad Generalem Praepositum Societatis vestrae pervenerunt, qui (si bene memini) etiam per hunc salutari me iussit. Ptolemaeo vestro, viro summo, me commendari peto. Ubi opusculum contra Baylium prodierit, iudicio ejus submittam.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

P[ax] C[hristi]

Remitto tandem scriptum tuum de rebus Sinicis, quod omnibus quotquot legerunt magnopere placuit, jamque Romam missum est ad Ptolemaeum. At vereor ne post bellum suppetiae, nam recens intelleximus nullam humanitus spem esse boni eventus, ideoque Praepositum Generalem nostrum, indixisse orationes et opera extraordinaria ad flectendum in vota

Although the places of monads may be designated through modifications or boundaries of parts of space, nevertheless monads themselves are not modifications of a continuous thing. Mass and its diffusion result from monads, but not space. For space, like time, is a certain order, namely (in the case of space) that of coexisting, which includes not only actual things but also possibles. It follows that it is something indefinite, like every continuum whose parts are not actual but can be taken at will, just like the parts or fractions of a unity. If there were in the nature of things other subdivisions of organic bodies into organic bodies, there would be other monads, other mass, and yet the space filled would be the same. For space is something continuous, but ideal, whereas mass is discrete, indeed an actual multitude, or a being by aggregation, but one from infinite unities. In actual things, simples are prior to aggregates; in ideal things, the whole is prior to the part. Neglect of this consideration has produced the labyrinth of the continuum.

The Reverend Father Dionysius Werl, Capuchin, had written to me a little while before his death, and he seemed to have begun a new work about which I know nothing.⁴

Some publisher or bookseller in Holland has offered his work on a subscription basis. We shall see what comes of it. For the rest, farewell and think kindly of me. From Hanover, 31 July 1709.

Most faithfully,

G. W. Leibniz

P.S.⁵ At the time my *Latest News from China* appeared, it was sent to Rome and, through Mr. Magliabechi,⁶ I believe, reached the superior general of your order, who (if I recall correctly) also decreed that his intermediary should pay his respects to me. I beg you to commend me to your Tolomei, a most excellent man. When my book against Bayle appears, I shall submit it for his appraisal.

30. Des Bosses to Leibniz¹

[Hildesheim, 6 September 1709]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

I am at last returning your piece on Chinese affairs, which greatly pleased all those who read it and has already been sent to Tolomei in Rome.² Yet I fear there will be no relief after the battle, for we have recently learned that there is no human hope of a favorable outcome, and for this reason our superior general has announced sermons and extraordinary

nostra Deum. Si causa ceciderimus, quo loco futura sit Religio Christiana ostendit Regium decretum quod adjungo si forte necdum vidisses. Adderem et libellum cujus titulus: *Reflexiones supra modernam causae Sinen-sis constitutionem juxta exemplar in Italia impressum in latinum translatae*. Sed exemplar quod vidi non est meum, neque aliud nancisci potui hactenus, spero autem me paucos intra dies ejus tibi copiam facere posse. Dignae sunt enim hae reflexiones oculis tuis.

Illustris Dominus de Cochenheim qui olim scriptum *de libertate Religionem Christianam apud Sinas praedicandi* Novissimis tuis Sinicis insertum ad te misit, et nunc Celessimi Principis Monasteriensis V.Cancellarius et Consiliarius intimus est, mihi benevolus in paucis, certior a me factus dissertationem tuam anti-Baylianam praelo maturam esse, mihi nuper mandavit ut significem sibi statim atque in lucem prodierit.

Recusus est Leodii liber de Spiritu novorum Augustini discipulorum, cujus exemplum cum peteres olim, distracta jam editione tota, desiderio tuo satisfacere non potui; nunc quot voles accersere potero.

Accedo jam ad argumentum philosophicum in penultimis tuis litteris tractatum. Ac imprimis scire velim quid sit illud per quod res ab initio creatae ad operationem magis postea disponantur. Non aliquid substantiale quia non Entelechia. Ergo accidens at quale illud? An modus an qualitas quales Schola admittit? Quidcumque tandem sit, permanens aliquid esse debet et cum monadibus semper duraturum, quod ab accidentis natura alienum esse videtur.

Fateor Physicum non demonstrare corpora, uti nec phaenomena, sed utorumque notitiam partim a sensibus partim a Metaphysica accipere; sed suppositis corporibus et phaenomenis quae extra nostram mentem apparent, Phaenomenorum causam demonstrare potest esse variam pro diversitate illorum juxta illud axioma: idem manens idem semper facit idem.— Cum Phaenomena effecta sint virium derivatarum vires autem derivatae ex primitivis constituentur, ubi erunt diversae vires derivatae, diversas esse quoque vires primitivas necesse erit. Atque adeo ex eo quod in massa aliqua determinata jam phaenomena appareant quae stantibus praecise viribus derivatis ab initio extantibus non apparuissent, colligi posset mu-

works for appealing to God in our prayers. The imperial decree, which I include in case you perhaps have not yet seen it, shows in what state the Christian religion will be in the future, if we should lose the cause.³ I also intended to include a pamphlet entitled *Reflections on the Present State of the Chinese Situation, Translated into Latin in Accordance with a Copy Printed in Italy*. But the copy I have looked at is not mine, and so far I have not been able to find another. I hope, though, that within a few days I shall be able to produce a copy of it for you, for these reflections are worthy of your attention.

I have reassured the distinguished Mr. von Cochenheim—he who once sent you an essay “On the Freedom of Preaching the Christian Religion in China,” published in your *Latest News from China*, and now is vice chancellor and a close advisor to the most noble prince of Münster, and who also has been kind to me on several occasions—that your work against Bayle is almost finished. He recently directed me to let him know immediately as soon as it is published.

The book on the spirit of the new disciples of Augustine,⁴ a copy of which you were seeking at one time and which I could not obtain for you because the entire edition had already been sold, has been reprinted in Liège. Now I will be able to order as many as you wish.

I come now to the philosophical issue considered in your penultimate letter. And first, I should like to know what that is through which things created at the beginning may be disposed for a greater operation later on. It is not something substantial, because it is not an entelechy; therefore, it is an accident, but of what sort? Is it a mode or a quality, such as the schools recognize? Whatever it is in the end, it should be something permanent, and something that will always endure with monads, which seems to be foreign to the nature of an accident.

I grant that physics does not demonstrate bodies, just as it does not demonstrate phenomena, but knowledge of both is acquired partly from the senses and partly from metaphysics. Yet, if we presuppose bodies and the phenomena that appear externally to our mind, physics can demonstrate the cause of the phenomena to be different by virtue of their variety, in accordance with the axiom that the same remaining the same always produces the same. Since phenomena are effects of derivative forces, and derivative forces are determined by primary forces, wherever there are different derivative forces, it is necessary that the primary forces also be different. And, furthermore, from the fact that certain already determined phenomena appear in a mass that would not have appeared from the underlying derivative forces existing at the beginning, it can be inferred that

tationem aliquam factam esse in viribus primitivis, earumque aliquas aut demptas aut additas. Hoc volebam dum dixi ob novarum monadum exortum aliquid in Phaenomenis mutandum videri.

Ipsae animae hominum aequae ac brutorum nunquid aliquam actionem exercent in materiam non primam tantum sed etiam secundam sive in ipsam massam? Haec actio porro aequae ac aliarum Entelechiarum actiones ad Phaenomena facere videtur. Ad haec nonne contra Sturmium demonstrasti posita quam Cartesiani statuunt plenitudine rerum et uniformitate materiae motuque solo accedente semper aequivalentia sibi substitui, perinde ac si tantum rota perfecte uniformis circa suum axem ageretur etc. atque ita statum unius momenti distingui non posse, ergo nec in phaenomenis varietatem existere posse adeoque praeter figuram, magnitudinem et motum admittendas esse formas *per quas distinctio apparentiarum in materia oriatur*. Ergo phaenomenorum varietas ab Entelechiarum varietate petenda est.

Si mentem tuam recte percipio, transcreatio animae irrationalis in rationalem esset substitutio animae rationalis in vicem irrationalis quae antea erat et jam desinit. Atque adeo gradus essentialis ille perfectionis additus animae non erit facultas accidentalis sed idem realiter cum ipsa animae de novo creatae et in prioris locum substitutae substantia. Sicque transcreatio miraculosa erit certe, cum afferat destructionem animae saltem prioris si non materiae primitivae quacum ista monadem constituebat. Contra quod nihil habeo quod reponam nisi hoc unum: paradoxum multis fortasse visum iri hominem rebus ut nunc sunt ita constitutis, non posse sine miraculo generari.

De caetero facultatem sentiendi et ratiocinandi philosophi quidam inter se distinxerunt, atque inter eos Gassendus aut certe Bernerius qui tomo 5 Gassendianae epitomes libro 6 pag. mihi 495 caeteris opinionibus repudiatis hanc ipsam amplectitur: animam nempe hominis ex duabus constare partibus: altera irrationali quae vegetativam et sensitivam includens corporea sit, ac veluti medium quoddam aut vinculum rationalis animae cum corpore; altera rationali vel intellectuali quae incorporea sit, a Deo creata, infusa et tanquam vera forma corpori media irrationali unita. Pro qua sententia nonnullos Scholasticos adducit.

some change has occurred in the primary forces, some of which were either removed or added. That is what I meant when I said it seemed that something must change in the phenomena because of the creation of new monads.

Is it true that humans souls themselves, as well as the souls of beasts, exercise some action not only on primary matter, but also on secondary matter, or on mass itself? This action, moreover, as much as the actions of other entelechies, seems to have an effect on the phenomena. Did you not demonstrate this against Sturm?⁵ If, as the Cartesians maintain, we assume the plenitude of nature and the uniformity of matter, and with only the addition of motion equivalent things are always substituted for each other, just as if a perfectly uniform wheel were merely moved about its axis, etc., so that its state at one moment cannot be distinguished from its state at another, then there can exist no variety in the phenomena. Consequently, besides figure, magnitude, and motion, we must admit forms, "through which the distinction among the appearances may arise in matter." Therefore, the variety of the phenomena must be sought from the variety of the entelechies.

If I understand your position correctly,⁶ the transcreation of an irrational soul into a rational soul would be the substitution of the rational soul for the irrational soul, which earlier existed and now has ceased to exist, and thus the essential degree of perfection added to the soul will not be an accidental faculty, but will be identical in reality with the very substance of the soul that has been newly created and substituted in place of the prior soul. Thus, the transcreation certainly will be miraculous, since it brings about the destruction of the previous soul at least, if not the destruction of the primary matter with which it constituted a monad. I have nothing to respond against this, except this one thing: it will perhaps seem a paradox to many that, with things constituted as they now are, a human being cannot be generated without a miracle.

For the rest, some philosophers have distinguished between the faculty of sensing and the faculty of reasoning, and among them Gassendi and certainly Bernier, who in book 6 of the fifth volume of his summary of Gassendi's philosophy,⁷ page 495 in my edition, after having rejected other views, embraces this one: namely, that the human soul consists of two parts, one irrational, including the vegetative and sensitive functions, which is corporeal and, as it were, a sort of medium or bond between the rational soul and the body; and the other rational or intellectual, which is incorporeal, created by God, infused, and, so to speak, the true form of the body, to which it is united by the mediate irrational part. In support of this view, he cites several Scholastics.

Honoratus Fabri libro 2. de Homine Propositione 41 asserit potentiam sensitivam in homine realiter distingui ab anima rationali et libro 7. propos. 11 statuit nihilominus in quolibet homine unam duntaxat esse animam, nempe rationalem, quia scilicet esse sentientis et vegetantis, ait ipse, includuntur in ipso esse hominis quod iis accidit tanquam forma materiae. Subdit: hinc facultas sentiens in homine est potentia quia subordinatur alteri formae quae dat esse hominis; in bruto est forma, quia constituit brutum.

Quod arguebam: Si miraculose superaddi dicatur gradus perfectionis ad animam rationalem requisitus inde fore ut naturae conformior et verisimilior (philosophice loquendo) sit animarum humanarum propagatio per traducem, sic explico: animas humanas in seminibus latentes se tandem exerere, uti se exerunt animae brutorum (Hoc enim traducem volo quod sine miraculo futurum esset) naturae conformius videtur quam transcreatio utpote miraculosa, nam natura miracula non exigit. Fateor durum esse animas humanas in seminibus latentes astruere quae nunquam ad humanae naturae maturitatem perveniant. Sed hoc parum reformidabit philosophus aliquis profanus qui nullo autoritatis divinae respectu ducitur, dicetque non magis id in rationalibus quam irrationalibus absurdum esse aut saltem tanti non esse ut propterea analogia inter utrasque tollenda sit aut ad miracula confugiendum. Hanc ob causam mihi magis probabatur altera productionem animae rationalis explicandi ratio, quam in priori epistola suggerebas et defendebas, ut nempe dicatur novi quidpiam ita creari et ante creatis addi, ut tamen nihil ex natura sua indestructibile interire necesse sit.

Spatium ideale quid ac indefinitum esse facile tibi assentior. At massa, quae realis est et realem diffusionem sive extensionem habet, quodmodo ex monadibus solis diffusionem et extensionem carentibus resultare possit, necdum assequor ex iis quae hactenus disseruisti, sive quod ea non satis penetrem sive quod principium quodpiam mihi ignotum supponas. Quod si Deus infinitas Monades novas creare posset non augendo massam (nempe ad novae Monadis corpus organicum non nisi veteres Monades adhibendo) videtur etiam infinitas Monades novas colligere et sibi invicem ita subordinare posse ut diffusio et extensio nulla oriatur. Quod enim sparsim massam non auget, hoc nec collectum extensionem per se

Honoré Fabri, in book 2, proposition 41, of his *On Man*,⁸ asserts that in a human being the sensitive power is distinguished in reality from the rational soul; and in book 7, proposition 11, he states that in spite of this, in any human being there is strictly speaking one soul, namely the rational soul, because obviously it is the soul of a sentient and vegetative being. He himself says: they are included in the very being of man, which is added to them as form to matter. He adds: for this reason, the sensitive faculty in a human being is a power, because it is subordinated to another form that supplies what it is to be human; in a beast, it is the form, because it constitutes the beast.

With respect to this I argued: if the required degree of perfection is said to be added miraculously to a rational soul, then it is more in conformity with nature and more probable (philosophically speaking) that the propagation of human souls is through traduction. I explain it thus: human souls latent in spermata at last express themselves, just as the souls of beasts express themselves (for by “traduction” I mean that which would exist without a miracle). This seems to be more in conformity with nature than does transcreation, inasmuch as the latter is miraculous, for nature does not require miracles. I grant that it is harsh to add human souls hidden in spermata that never achieve the maturity of human nature. Yet some profane philosopher who is moved by no respect for divine authority will hardly be impressed by this and will say that it is no more absurd in the case of rational souls than in the case of irrational souls; or, at least, that the difference is not such that it warrants the elimination of the analogy between the two cases, or our having to take refuge in miracles. For this reason, I preferred a different way of explaining the production of rational souls from the one you suggested and defended in your earlier letter, namely, that we say that something new is created and added to what had previously been created in such a way that it nonetheless is not necessary to destroy anything that is indestructible by nature.

I readily agree with you that space is something ideal and indefinite; but I do not yet understand from the things you have said so far—either because I have not sufficiently penetrated them or because you assume some principle that is unknown to me—how mass, which is real and has a real diffusion or extension, can result from monads alone, which lack diffusion and extension. But if God could create infinite new monads while not increasing mass (namely, by using only old monads for the organic body of a new monad), it seems that even an infinity of new monads could come together and be subordinated to one another in such a way that no diffusion or extension arises. For what will not increase mass when dispersed, will

faciet. Vide quaeso num operae pretium sit rem hanc maximi in philosophia momenti explanari dilucide magis ad meum meique similium caput. Sed imprimis juverit nosse quodmodo realem corporis Christi in Eucharistia praesentiam juxta principia tua propugnes, quo de argumento nonnihil credo disserueris in opere Tuo Anti-Bayliano. Vale vir ill^{me} et dubitatiunculas meas boni consule. Dabam Hildesiae 6 Septemb. 1709.

Devotissimus in Christo servus

Bartholomaeus Des Bosses

Leibniz to Des Bosses

Admodum Reverende Pater Fautor Honorande

Etsi hoc mihi non tribuam, ut putem, sententiam meam de rebus Sinicis quicquam posse habere autoritatis, sperem tamen rationes non spernendas visum iri, et certe nihil praecipitandum videri in re non satis discussa. Gratias ago pro communicatione decreti Sinensis. Displicet quod Sinenses Japonicae revolutionis notitiam habere video.

Gratum erit exemplum libri de Spiritu novorum Augustini discipulorum, etsi interdum plus ostendat mordacitatis quam aequitatis. Nempe Iliacos intra muros.

Quaero an tot animas in nobis ponere liceat, quot gradus essentielles, v.g. an tres animas habebimus, quia (ex vulgari saltem sententia) habemus vegetativae sensitivae et rationalis perfectiones in eodem subjecto? Negabis opinor. Non ergo dicemus dato novo gradu essentiali novam animam dari. Hos gradus appellare liceat Facultates. Intellego autem primitivas, aliquo modo non invicem dependentes, ut sensitivitas est independens a rationalitate, etsi fortasse in creaturis non contra. Putem autem gradus essentielles non nisi a Deo dari et tolli posse, quod secus est in qualitatibus seu derivativis. Ego alioqui non soleo curare has de Entitatibus seu abstractis quaestiones, diceremque tali casu substantiam quae antea rationari non poterat nunc posse, idque non naturae vi, sed Dei. Dicis: *Si mentem tuam recte percipio, animae irrationalis in rationalem transcre-*

not produce extension by itself when gathered together. See, I ask, whether it is worth the effort to explain this matter, which is of the greatest philosophical importance, more clearly for the sake of my comprehension and those like me. But first it will help to know how on your principles you defend the real presence of Christ's body in the eucharist, a topic about which I believe you say something in your work against Bayle.⁹ Farewell, most distinguished Sir, and look on my little doubts with kindness. From Hildesheim, 6 September 1709.

Your most devoted servant in Christ,
Bartholomew Des Bosses

31. Leibniz to Des Bosses¹

[Hanover, 8 September 1709]

Most Reverend Father, Honored Supporter,

Although I do not allow myself to think that my views on Chinese affairs can have any authority, I still hope that my arguments will not be seen as worthless, and that in any case it will not be thought that anything has to be done too hastily in this insufficiently examined matter. I thank you for communicating the Chinese decree. It is displeasing to see that the Chinese are aware of the upheavals in Japan.²

I would appreciate a copy of the book on the spirit of the new disciples of Augustine,³ even though it sometimes reveals more asperity than equanimity. They are indeed like the Trojans within the walls.⁴

I question whether it is permitted to suppose as many souls in us as there are essential degrees; for example, whether we shall have three souls, since (according to common opinion at least) we have the perfections of vegetative, sensitive, and rational souls in the same subject. I think you will deny this. We shall not say, therefore, that where there is a new essential degree, there is also a new soul. These degrees may be called "faculties," but I think of them as primitive, in some sense not dependent on one another, just as sensitivity is independent of rationality, even if in creatures the converse probably does not hold. I believe, however, that essential degrees can be added and removed only by God, which is not the case with qualities or derivative things. As a rule I am not accustomed to troubling myself with these questions about entities or abstractions, but I should say that in such a case a substance that earlier could not reason now can, and this not by the power of nature but by that of God. You say: "If I understand your position correctly, the transcreation of an irrational soul into a rational soul would be the substitution of the rational soul for the irrational

atio esset pro anima irrationali, quae desiit substituere rationalem. Sed vides ex dictis hanc mentem meam non esse. Qui duplicem statuunt in nobis animam, velut Gassendistae, animam immaterialem brutis non tribuunt. Itaque illi nihil ad sententias meas. Si paradoxum putas, hominem non posse sine miraculo generari paradoxa etiam erit doctrina omnium vestrarum scholarum de creatione animae rationalis, et recurrendum erit ad ejus praeexistentiam: nam si animae rationales in seminibus latent talis tradux revera est praeexistentia. Quod si id malis, quam animas a Deo ex irrationalibus reddi rationales, adeo non repugno, ut potius faveam. Et sane aliquando cogitavi, innumeras quidem animas sensitivas esse in seminibus humanis, ut omnium animalium, sed eas solas habere rationalitatem etsi nondum se exerentem quarum corpus organicum in id destinatum est, ut aliquando sit humanum quod jam in eo perspicui posset a satis perspicaci. Ita transcreatione opus non erit. Adscribam verba schediasmatis cujusdam mei Latini: “Propagatio contagii a lapsu primorum parentum in animas posterorum non melius videtur explicari posse, quam statuendo animas posterorum in Adamo iam fuisse infectas, sed eas tunc in seminibus (aliquo modo jam organicis et viventibus) existentes, fuisse sensitivas tantum, donec in conceptu novissimo simul corpus aliquod seminale ad hominis formationem determinaretur et anima sensitiva ad gradum rationalitatis eveheretur, sive is statuatur miraculose a Deo superaddi, sive in illis Animabus seminalibus quae ad humanitatem destinatae sunt, jam lateat in actu signato sed evolvatur demum et sese exerat, cum corpus organicum tali animae proprium per ultimum conceptum etiam in humanum partim evolvitur partim transformatur, humano organismo etiam non nisi in harum animarum corporibus praestabilito, aliis infinitis animabus animalculisque seminalibus (si talia admittimus) vel certe praeformatis corporibus organicis viventibus, intra sensitivum naturae gradum subsistentibus, tam in actu signato quam in exercito, ut scholae loquuntur. Erit ergo Tradux quidam sed paulo tractabilior quam quem Augustinus aliique viri egregii statuerunt, non animae ex anima (rejectus veteribus, ut ex Prudentio patet, nec naturae rerum consentaneus) sed animati ex animato.”

Massa nihil aliud est, quam phaenomenon, ut Iris. Si Deus novam creet animam vel Monada potius, et faciat priora corpora organica coire in

soul, which ceases to exist.” But you see from what I have said that this is not my position. Those, like the followers of Gassendi, who assume a two-part soul in us do not attribute an immaterial soul to beasts. Thus, they have no relation to my views. If you think it paradoxical that a human being cannot be generated without a miracle, then the teaching of all your schools concerning the creation of a rational soul also will be paradoxical, and we shall have to fall back on their preexistence. For if rational souls are concealed in spermata, such a traduction is in fact preexistence. But if you prefer this to God’s making rational souls out of irrational ones, I certainly do not object, as I am more inclined to it. Indeed, I have sometimes thought that there are, in fact, innumerable sensitive souls in human spermata, just as in the spermata of all animals, but that those alone have rationality (although it does not yet reveal itself) whose organic bodies are destined at some time to be human, a fact that could already be perceived in them by a sufficiently perspicuous mind. Thus, there will be no need for transcreation. I shall add a few words from one of my Latin essays.⁵ “It seems that the propagation of the stain from the fall of the first parents to the souls of their descendents can best be explained in this way. Let us suppose that the souls of the progeny were already tainted in Adam, but that existing then in spermata (in some way already organic and living), they were only sensitive souls, until, at the final conception, at once some seminal body was determined to form a human being and the sensitive soul was elevated to a degree of rationality. Now, either this is brought about miraculously through a divine superaddition or, in those seminal souls that are destined for humanity, it is already concealed in a prearranged act.⁶ In the latter case, it will finally be uncovered and reveal itself when the organic body proper to such a soul, through a final conception, is also partly uncovered and partly transformed into a human body, for a human organism certainly has only been preestablished in the bodies of these souls, while an infinity of other souls and seminal animalcula (if such are acknowledged), or at any rate preformed living organic bodies, remain within the limits of a sensitive degree of nature, with respect to both prearranged and exercised acts, as the schools say. Therefore, there will be a sort of traduction, but one that is a little more manageable than that which Augustine and other distinguished men maintain: not a traduction of a soul from a soul (something that was rejected by the ancients, as is clear from Prudentius, and is not in agreement with the nature of things), but of one animated thing from another.”

Mass is nothing but a phenomenon, like a rainbow. If God should create a new soul, or rather a new monad, and should make prior organic bodies

novum corpus organicum non ideo auxerit massam, seu quantitatem phaenomeni, ut patet. Suspicionem tamen hoc vix a Deo unquam fieri, cum nullam ejus necessitatem videam. Disputationes de his quae Deo possibilia sunt multis tricus obnoxiae sunt.

Quod de Eucharistia quaeris meum explicandi modum, respondeo apud nos nullum esse locum neque transsubstantiationi neque consubstantiationi panis, tantumque pane accepto simul percipi corpus Christi, ut adeo sola explicanda sit corporis Christi praesentia. Et jam Turnemino respondi, praesentiam esse aliquid Metaphysicum, ut Unionem, quod non explicatur per phaenomena. An et quomodo transsubstantiatio vestra explicari possit in philosophia mea altior disquisitio foret. Si accidentia realia vultis restare sine subjecto, dicendum est sublatis monadibus panem constituentibus, quoad vires primitivas activas et passivas, substitutaque praesentia Monadum corpus Christi constituentium, restare solum vires derivativas quae in pane fuere, eadem phaenomena exhibentes quae monades panis exhibuissent. Quod superest vale et fave. Dabam Hanoverae 8 Sept. 1709.

Deditissimus

G. G. Leibniz

Des Bosses to Leibniz

Illustrissime Vir Patrone Colendissime

P[ax] C[hristi]

Hildesio recta Limburgum patriam meam petii negotiorum causa: inde Coloniam 9^a Novembris perveni. Postero die redditae mihi sunt honoratissimae litterae tuae 25 Octobris datae, quibus serius respondeo, cum quod sarcina mea quae litteris Tuis preciosius nihil continebat, necdum advenerat, tum quod febricula (quod climatis mutationi tribuo) dies aliquot in valetudinario me tenuit, denique quod ingruentes novi muneris occupationes vix ullum alia meditandi spatium relinquebant. Quare indulgebis tarditati meae, quam celeritate posthac compensare studebo. Hac spe fretus ad argumentum accedo litterarum Tuarum ad quas ob instantem Hildesio discessum, ut par erat, non respondi. Inter legendum praeclari operis Tui partem, conjeceram in cartam nonnulla quae ad Te perscribere animus

unite into a new organic body, he would not thereby have increased the mass or quantity of phenomena, as is obvious. Nevertheless, I suspect that God rarely ever does this, as I see no necessity for it. Discussions about what is possible for God are responsible for much nonsense.

As to what you ask regarding my way of explaining the eucharist, I respond that for us there is no place for either the transubstantiation or consubstantiation of the bread, but only that Christ's body is perceived at the same time that the bread is received, so that the presence alone of Christ's body must be explained. And I have already replied to Tournemine that the presence is something metaphysical, like a union, which is not explained through the phenomena.⁷ Whether and how your transubstantiation can be explained in my philosophy would be a more difficult question. If you wish to hold real accidents that remain without a subject, it must be said that when the monads constituting the bread are destroyed with respect to their primitive active and passive powers, and the presence of the monads constituting Christ's body is substituted for them, there remain only the derivative forces that were in the bread exhibiting the same phenomena that the monads of the bread had exhibited.⁸ For the rest, farewell and think kindly of me. From Hanover, 8 September 1709.

Most faithfully,

G. W. Leibniz

32. Des Bosses to Leibniz¹

[Cologne, 18 January 1710]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

From Hildesheim I traveled directly to Limburg in my homeland, where I had business. From there I arrived in Cologne on 9 November. The next day brought me your much-appreciated letter of 25 October, to which I am responding rather late, both because my baggage, which contained nothing more precious than your letter, had not yet come, and because a slight fever (which I attribute to the change in climate) kept me indisposed for several days, and finally because the pressing responsibilities of my new post left me scarcely any time for thinking about other matters. In order that you may overlook my lateness, I shall strive to make up for it as quickly as possible hereafter. Trusting in this hope, I turn to the contents of your last letter, to which I did not respond, as I should have, because of my imminent departure from Hildesheim. While reading the portion of your excellent work, I jotted down some of the things I intended to write to you about at length.² But that sheet has somehow been lost; at least I do not

erat, sed scheda ista nescio quo casu periit. Inter reculas certe meas non reperio. Quae utcunque recordor accipe quia jubes et boni consule.

Initium facio a grammaticis sive potius Typothetarum mendis. Voces, *consecution*, et *contradistingué*, quantumvis notionem sibi subjectam belle exprimant, in Fureteriano tamen quod Trivultii editum est Dictionario non reperi, an quia civitate necdum donatae sunt? Nunquid ergo Italico caractere distinguendae erant uti praecipit Buhursius? Adhaec alicubi legi: *Gerson a dit contre Rusbrock*. Quid Gerson dixit? Id utique quod immediate ante pronunciabas. Fuerit igitur in Manuscripto Tuo *Gerson l'a dit* etc.: ubi relativum omittendo sententiam corruptit Typographus. Ignosce, illustrissime Domine tam futilia monenti. Libro tam eleganti tamque accurate elucubrato naevum vel minimum aspergi non patior. Haec de vocibus, nunc ad res ipsas venio.

Ac imprimis Scholae nomine gratias habeo quod omnes, quae contra religionem Christianam militant, difficultates, Aristotelicae Logicae solius ope, quantum satis est expediri posse statuis. Sed verissimum hoc effatum Tuum vide quaeso an non accommodari possit etiam ad ea quae contra Catholicorum cultum adducuntur speciatim? Hoc enim agit Veronius, cuius Methodus Bellarminianae quidem dissimilis, non tamen contraria est, nec si justis coërceatur limitibus, spernenda videtur: nam et ab Augustino (uti demonstrant ex professo Walemburgii Fratres) aliisque viris eruditiss atque Nicolio nominatim usurpata est, et hoc saltem evincit; invicta insolubiliaque non esse ea quae contra nos proferuntur argumenta, eo fere pacto quo adversus Baylium contendis invicta non esse quae contra Christianos universim intorquentur. Confer si placet utrorumque robur, fallor aut non magis haec quam illa methodo illac tua elidi posse deprehendes. Prodest insuper ad ostendendum eos, qui Ecclesiae auctoritatem falli nesciam rejiciunt, principiis destitui saepe, quibus dogmatum certitudinem superstruant. Quod si ad scepticismum hac ratione deducuntur, videant methodine culpa ea sit an sua, qui id inficiantur quod si verum non sit, multa fluctuare necesse sit. Apud nos equidem nullus scepticismo locus est, qui principium aliunde firmum habere nos profiteamur quo solo nixi (saltem in multis) an et quo sensu revelatum quidpiam sit, agnoscamus, et ad inconcussam in articulis controversis veritatem perveniamus, auctoritatem scilicet Ecclesiae contra quam quantumvis speciosum sit quod obijcitur non majus pondus habere debet, quam ea quae contra Mathematici-

find it among my possessions. Because you ask for it, accept and regard favorably whatever I recollect.

I deal first with grammatical, or rather typographical, errors. As much as they may express very well the notions suggested by them, I nonetheless do not find the words *consecution* and *contradistingué* in the Furetière dictionary published at Trévoux.³ Is this because they are not yet proper French? In that case, should they not have been marked off by italics, as Bouhours advises? Somewhere I read these words: "Gerson a dit contre Rusbrock." What did Gerson say? Obviously what you reported immediately before. Therefore, what was in your manuscript was "Gerson l'a dit . . . ," and the printer corrupted the sentence by omitting the pronoun.⁴ Forgive, most distinguished Sir, such trivial suggestions. I shall not accept a blemish on such an elegant and carefully prepared book, or allow it to be sullied in the least. So much for words; now I come to things.

In the first place, I am grateful on behalf of the schools that you believe that all the objections made against the Christian religion can be adequately answered with the help of Aristotelian logic alone. But I wonder whether you do not think that your most true proposition could be applied even to those that have been brought specifically against the Catholic church. This is advanced, for example, by Véron, whose method is certainly unlike that of Bellarmine, though not opposed to it, and not, it seems, to be dismissed if restrained within proper limits.⁵ For it also has been employed by Augustine (as the Walemburg brothers point out explicitly)⁶ and other learned men, in particular Nicole;⁷ and this shows at least that the arguments brought against us are not irrefutable and unanswerable, just as you insist against Bayle that those aimed at Christians in general are not irrefutable. Compare, if you will, the strength of both. Unless I am mistaken, you will find that the former arguments are as easily destroyed by your method as the latter. Moreover, it is useful for showing those who reject the authority of the Church as incapable of error that they often abandon the principles upon which they may build dogmatic certitude. But if they are led by these means to skepticism, they may consider whether the method is to blame or they themselves, who deny that [proposition] which, if it is not true, many things must remain uncertain. Of course, there is no place for skepticism for those of us who profess to have a firm foundation from another source, with whose support alone we may recognize (at least in many cases) whether and in what sense something is revealed, and may achieve a stable truth in disputed questions. This foundation, obviously, is the authority of the Church, against which objections, however plausible, ought not to have any more weight than those which

carum disciplinarum certitudinem Sextus Empyricus, Hobbii alique concessere.

Dallaei opus quod memoras, non vidi. At vidi Calixti digressionem de arte nova. Vidi etiam Bartholdi Nihusi *Artem Novam* ipsam et *Apologeticum*, quem posteriorem a Baylio desideratum fuisse ex Dictionario suo comperio. Atqui non pauca ejus exemplaria in Hildesiensi nostro collegio etiamnum non compacta supersunt. Propositum habebat Nihusius ostendere, quod nullae contra nos a Protestantibus afferantur demonstrationes, quod Baylius non diffitetur in articulo *Nihusius*.

Tuam de animae origine sententiam ingeniosam certe, et explicando originali contagio ut videtur accommodam, quod attinet; malim, dicas gradum illum ac facultatem primitivam rationalitatis (quae utique substantialis est, utpote hominem constituens, et a non homine distinguens) in conceptu novissimo superaddi primum potius quam in animabus sensitivis in semine Ada[mico] jam existentibus latuisse jam tum in actu signato. Hoc enim posterius non ferent Theologorum nostrorum aures. Prius illud facilius fortasse digererent. Nec video cur *miraculose* superaddi dici necesse sit cum ab additione illa tam facile miraculum excludere possis quam philosophi passim alii a creatione: sed haec de vocabulo solo controversia erit. Unum adhuc moneo: vetitam a nobis defendi propositionem hanc: *Possibilis est potentia quae quamvis naturaliter sit incapax operandi libere, divinitus tamen elevata libere operetur*.

Dum haec meditor, forte se mihi offert Fortunii Liceti Genuensis Philosophi et Medici in Pisana Academia quondam Professoris opus de *Ortu humanae animae* libris tribus comprehensum centum et octo abhinc annis excusum Genuae, sed (quod dolendum est) integro alphabetho mancum, cujus epilogum totius operis hic verbotenus referre juvat, ut, quatenus tibi consentiat, intelligas si forte liber ille ad manum non esset.

“Ex traditis ergo liquido constare potest animam humanam quantum ad sui partes ratione carentes, vegetalem, inquam, et sensitricem prodire omnino a patre mediante semine, nimirum anima patris penes partem vegetalem ac sensitivam divisa in coitu ad partitionem subjecti, multiplicataque et in semine ejaculato permanente, ipsaque eadem numero semini sanguinique foemineo communicata nono circiter die a coitu, quo tempore fit conceptio. At, quantum ad partem rationalem, proxime a Deo optimo

Sextus Empiricus, Hobbes, and others have advanced against the certitude of mathematical knowledge.⁸

I have not seen the work of Daillé that you mention, but I have seen Calixtus's essay on the new art.⁹ I have also seen Barthold Nihus's *New Art* itself, as well as his *Apology*, which I gather from his dictionary Bayle had hoped to find.¹⁰ And still, even now there remain more than a few unbound copies of it in our college in Hildesheim. Nihus intended to show that no demonstrations may be levied against us by Protestants, which Bayle does not deny in the article "Nihusius."

Your view of the origin of the soul is certainly clever and suitable, so it seems, for explaining the original stain. I should prefer you to say that that degree and primitive faculty of rationality (which in any case is substantial, as it constitutes a human being and distinguishes the human from the nonhuman) is first added in the final conception, rather than that it was concealed as a designated act in the sensitive souls existing already in the semen of Adam. For the ears of our theologians would not allow the latter. They would perhaps accommodate the former more readily. I do not see, though, why it is necessary to say that it is added "miraculously," for you could exclude a miracle as easily from that addition as other philosophers generally exclude one from creation; but this will be a dispute merely about a word. I point out one further thing. The following prohibited proposition is rejected by us: "It is possible for there to be a power which, although it is naturally incapable of acting freely, may nevertheless operate freely when elevated by God."

While reflecting on these matters, I by chance came across a work *On the Origin of the Human Soul*, by the Genoan Fortunio Liceti, sometime professor of philosophy and medicine at the Academy of Pisa. The work, consisting of three books, was published in Genoa 108 years ago, but (regrettably) is missing many pages.¹¹ In case you should not have the book at hand, I am pleased to reproduce here verbatim the epilogue of the complete work, so that you may see to what extent it agrees with you.

It goes as follows: "From what has been said, therefore, it can be established with certainty that, with respect to its parts that lack reason—that is, the vegetative and the sensitive—the human soul proceeds entirely from the father, through the mediation of semen, with the soul belonging to the father divided into vegetative and sensitive parts in coitus for the partition of the subject, and compounded again in the enduring ejaculated semen. The numerically identical soul is communicated to the semen and the female blood approximately nine days after coitus, at which time conception occurs. On the other hand, with respect to the rational part, it is simultane-

eodem instanti creari et infundi corpori organizato non ante quadragesimam diem a conceptione. Quae omnia mihi a principio proposita fuerant disquirenda.” Sic ille. Subiit cogitatio num fortasse tractatus hic censuram aliquam Romae passus esset: consului Sotomajoris Indicem librorum prohibitorum, nec Liceti nomen in illo reperi. Credo Tuam sententiam cum exceptione a me addita non magis periclitaturam quam illam Liceti. Sed ulterius mihi disquirendum puto an liber iste confixus non sit.

Venio nunc ad Eucharistiam. Communis equidem, ut nosti, Theologorum nostrorum sententia est: manere in ea accidentia realia et physica sine subjecto, cui doctrinae belle consonat ea quam suggeris de viribus primitivis sublatis et derivativis manentibus hypothesis. Verum cum vires derivatae juxta Te nihil aliud sint quam virium primitivarum modificationes, quo pacto sublatis primitivis manere derivatae possint, non capio, nisi forte modos cum accidentibus quae vocamus absoluta confundis. De caetero in Protestantiam omnium, cum pane accepto simul percipi Christi corpus asserentium aequae ac Catholicorum sententia, restat adhuc explicandum, qua ratione sacrosanctum corpus illud cum panis dimensionibus penetrari possit. Hanc enim penetrationem postulant ni fallor omnes ii qui nobiscum contra reformatos realem Christi praesentiam tuentur. Non, opinor, dices substantias panis et corporis salva utriusque extensione se mutuo penetrare. Atqui licet substantiae corporeae conceptum in extensione non consistere demonstres, a substantia tamen corporea continuata et repetita (qualis utique semper erit Christi corpus) extensio abesse non posse videbitur, cum extensio juxta Te sit substantiae nitentis et renitentis repetitio quaedam ac continuatio, nisus autem iste ab ipsa substantia nitente separari nequeat.

Quod de Angelorum corporibus alicubi innuis, non renuo, modo (ut olim ad Te scripsisse memini) una ex spiritu et corpore substantia personae ne coalescat. Habeant sane angeli corpus per relationem imo et per unionem qualis intelligentias inter et orbis caelestes a Peripateticis veteribus statuebatur, at non qualis animam inter et corpus hominis intercedit.

De re Sinensi quid dicam? Urbem celebrem obsessam cogita et rumores in utramque partem pugnantes, aliis jam captam aliis obsidione solutam

ously created and infused into the organized body at the best moment by God no sooner than forty days after conception. And I have been obliged to investigate everything reported from the beginning." It occurred to me that perhaps this treatise had been submitted to some censor in Rome. I checked Sotomayor's index of prohibited books and did not find Liceti's name in it. I believe that your view, with the restriction I have placed on it, will be no more at risk than Liceti's. Nevertheless, I think I should investigate further whether or not his book has been banned.

I come now to the eucharist. The common opinion of our theologians, as you know, is indeed that real and physical accidents remain in the eucharist without a subject, a doctrine that agrees nicely with the hypothesis you suggest of the primitive forces being destroyed and the derivative ones remaining. But since derivative forces according to you are nothing more than modifications of primitive forces, I do not understand how the derivative forces could remain when the primitive ones had been destroyed, unless perhaps you confound modes with the accidents we call "absolute." Moreover, in the opinion of all Protestants who claim just as Catholics do that when the bread is received the body of Christ is perceived, it remains as yet to be explained how that sacred body can be penetrated with the dimensions of the bread. For, unless I am mistaken, this penetration is demanded by all those who with us defend the real presence of Christ against the Reformed.¹² You do not say, I assume, that the substances of the bread and the body penetrate each other, with the extension of both preserved. And yet, even if you demonstrate that the concept of corporeal substance does not consist in extension, it seems that extension cannot be absent from a continued and repeated and nonetheless corporeal substance (such as the body of Christ certainly always will be), since extension according to you is a certain repetition and continuation of a striving and resisting substance, and that striving cannot be separated from the striving substance itself.

I do not oppose what you somewhere suggest about the bodies of angels, provided (as I remember having written to you in the past) one substance or person is not established from the spirit and the body. Angels may indeed have bodies through a relation, and even through a union such as you understand it, or as the ancient Peripatetics maintained between them and the celestial spheres, but not such as occurs between the human soul and the human body.

What shall I say about the Chinese affair? Imagine that a renowned city has been besieged and that there are conflicting rumors on both sides, with some assuming in accordance with their sympathies that it has already

pro affectu mentientibus. Hoc in aestu nunc versamur ultramontani, imo et ipsi cisalpini. Lepidum est quod nuper ad nos scriptum, si modo verum. Energumenus in Hispania quidam ab adjurante sacerdote rogatus: quot daemonibus infestaretur, respondit unicum se habere hospitem. Tum sacerdos ad daemonem. Atqui, subjecit numerus esse soletis. Cui daemon: unus huic negotio sufficio: majus alii curant. Ecquod illud? Ut e Sinis Jesuitae pellantur.

Mitto Libellum supplicem a Lusitano legato oblatum Pontifici, ex Italico conversum obiter, et satis mendose excussum. Ajunt Cardinalem Paulucium eidem legato interposita sua cardinalis et administri Pontificii fide asseverasse nihil hucusque super hac causa statutum a Pontifice, quidquid adversarii garriant. In adjecta scheda reperies inter caeteros titulum libri quem notis considerationibus opposuere qui contra sentiunt. Certatur utrimque strenue. Scribunt Belgae nostri prodiisse gallicam eamque accuratissimam simul et elegantissimam rituum Sinensium Apologiam, sed ea his locis necdum visa est. Ubi exemplar nactus fuero, mittam promptissime. Sed et indicabo libros recenter editos quos in Batavia frustra quaeras, quosque te nosse velle judicavero, addito pretio si haberi possint, ut de iis accersendis statuas ipse. Quam ad rem lubens opellam meam offero.

Ptolemaeum nostrum ita Sinensi negotio immersum reor ut ad meas, quibus Tuum de re Sinensi scriptum addideram, respondere non meminerit. Ubi operis tui exempla quae avidissime expecto, miseris, excitabo virum si quidem excitari potest, jucundissimi muneris denuntiatione.

Dirigi autem poterunt ad Dominum Lücken Hildesiensis Postarum Magistri Vicarium vulgo *officier de la poste*, qui deinde ad me perferenda curabit.

Vitam Goberti Patribus Antverpiensibus misi pridem, necdum tamen eo pervenisse comperi, aurigarum, credo, culpa, qui tarde admodum ultro citroque commeant et in via moras trahunt.

Reperitur in Collegii nostri bibliotheca manuscriptum Martini Poloni Chronicon, vetustissimum, et quantum colligere licet, auctori pene coëta-

been captured, others that it is free from imminent danger. We on this side of the Alps are now taken up with this controversy, as indeed those in the south are as well. The following piece of wit was recently sent to us; if only it were true. A possessed man in Spain was asked by a priest who observed him, by how many devils he was disturbed. The man responded that he had a single guest. Then the priest asked the devil, "But is this your customary number?" To which the devil replied: "One is enough for this affair; more will take care of the others." Is there anything in that? In this way, the Jesuits are being driven from China.

I am sending a supplicatory pamphlet presented to the pope by the Portuguese legate, translated from Italian incidentally and done quite badly.¹³ They say that Cardinal Paulucci, having pledged his word as a cardinal and assistant to the pope, has asserted to the same legate that whatever nonsense our opponents may talk, nothing has been decided thus far by the pope concerning this affair. On a separate sheet¹⁴ you will find, among other things, the title of a book that those who think otherwise have advanced in response to the usual arguments. The position of each side is forcefully defended. Our Belgian brothers write that an extremely meticulous and, at the same time, elegant apology on behalf of the Chinese rites has appeared in French; but it has not yet been seen in these parts. When I find a copy, I shall send it immediately. I shall also inform you of recently published books that you may not be able to find in Holland, or any that I judge you would want to know about, with the prices indicated if they are available, so that you may decide for yourself whether they are worth ordering. In this regard, I am pleased to offer my meager efforts.

I suspect our Tolomei is so taken up with the Chinese affair that he has not remembered to respond to my letter in which I had included your essay on Chinese matters. When you have sent the copies of your work, which I most eagerly await, I shall rouse the man, if indeed he can be roused, with a description of a most delightful book.

The copies could be sent to Mr. Lücken, deputy postmaster of Hildesheim, commonly known as the "officer of the post," who will then take care of forwarding them to me.

I dispatched the life of Gobert¹⁵ to the Antwerp fathers a long time ago, but I have learned that it has not yet arrived there, the fault lying, I believe, with the coachmen, who go there and back very slowly, and linger over stops along the way.

In the library of our college there is found an extremely old manuscript chronology by Martin Polonus—as far as one can gather a manuscript nearly contemporary with the author—in which there is not even the

neum, in quo Laciniae de Joanna Papissa ne vestigium quidem. Illud ipsum est, quod Typis vulgandum curavit F. Joannes Caesar Monasterii S. Catharinae sacellanus Ordinis Praemonstratensis Canonicus Knechteldensis Anno 1616. Quod indicandum Tibi duxi ob tuum de Pseudopapissa illa opusculum. Quod an Antibayliani operis tui appendix futurum sit scire aveo. Cum latinum sit, esset hic fortasse Typographus qui sub conditione praescripta publicandum susciperet.

Pardiesii et Amici quae memoras opuscula alibi vidi olim et ex parte legi, hic (quod mirum) nusquam reperio. Deschalius adest, sed primae editionis. Item Aegidii Francisci de Gotignies *Idea Logisticae* Romae edita 1677 in 4°. Logisticam Universalem, alterum ejusdem auctoris et argumenti opus spissius Neapoli anno 1687 editum in folio, nec non Gregorii a S. Vincentio problema Austriacum diu conquisitum aegre tandem apud bibliopolam reperi. De Ozanamii *Elementis Algebrae* quid sentias aveo scire. Gratum facies, alios insignes si suggesseris. Newtoni Philosophiae naturalis Principia mathematica, et Hospitalii analysis infinitorum, quem utrumque librum habeo, sunt adhuc supra captum meum. Manuductorem ad haec Matheseos adyta desidero. Magno mihi dispendio fuit Hannovera non transiisse, cum ob alia multa, tum quod coram aliqua hoc super studio documenta et auctorum notitiam ex ore tuo excipere licuisset. Annum quem decurrimus faustum Tibi felicemque apprecor. Vive Vir illustrissime Reipublicae litterariae bono, meque inter tuos cultores non postremum numerum et vale. Dabam Coloniae Agrippinae 18 Januarii Anno 1710.

Illustrissimae dominationi tuae

Devotus ex asse famulus

Bartholomaeus Des Bosses SJ

P.S. Librum cui titulus *Le veritable esprit des nouveaux disciples* de S. Augustin Leodio expecto tibi mittendum: constant quatuor ejus volumina compacta duobus imperialibus. Causam Quesnellianam etiam, si cupis, habere possum.

Litterae si quas scribes, Hildesii supramemorato D. Lücken commendari poterunt. Significa num litteras ea via mitti placeat qua nunc mitto.

slightest trace of the popess Joan. It is this work that F. Joannes Caesar, canon of the monastery of St. Catherine at Knechtsteden, took the trouble to have published in 1616.¹⁶ I have been led to mention it to you, because of your little book on the pseudo-popess. I am eager to know whether it may be a future appendix to your work against Bayle. Since it is in Latin, there may perhaps be a printer here who would agree to publish it under the prescribed condition.

I find nowhere here (which is surprising) the works you mention by Paradies and friends—works I saw elsewhere at one time and read in part. Dechales is here, but in the first edition;¹⁷ likewise *The Idea of Logistic*, by Gilles-François Gottignies, published in Rome in 1677 in quarto.¹⁸ I have discovered *The Universal Logistic*, another work by the same author that is more closely argued, published in Naples in 1687 in folio, as well as the *Problems* of Grégoire de Saint-Vincent, which I have sought for a long time and finally found in a bookstore.¹⁹ I am eager to know what you think of Ozanam's *Elements of Algebra*.²⁰ You will do me a service if you suggest other distinguished works. Newton's *Mathematical Principles of Natural Philosophy*²¹ and Hospital's *Analysis of Infinites*,²² both of which I own, are to this point beyond my comprehension. I wish I had a guide to these inmost recesses of mathematics. It was a great loss to me that I did not pass through Hanover, because, along with many other things, it would have allowed me to receive personally from your mouth some lessons in the subject just mentioned and news of authors. I pray for your good fortune and happiness in the year we are entering. May you live long, most distinguished Sir, for the good of the republic of letters, and do not count me the last among your admirers. Farewell. From Cologne, 18 January 1710.

Your Excellency's completely devoted servant,
Bartholomew Des Bosses, S.J.

P.S. I expect the book entitled *The True Spirit of the New Disciples of St. Augustine* to be sent to you from Liège. Its four bound volumes cost two imperials. I can also acquire, if you desire, *The Quesnel Case*.

Any letters you write could be entrusted to the aforementioned Mr. Lücken in Hildesheim. Please let me know whether it is acceptable for letters to be sent by the route I now use.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

P[ax] C[hristi]

Ante dies octo paucula perscripsi nova de negotio Sinensi. Mitto nunc ea quae partim Roma partim aliunde ad nos perlata sunt ex quibus in spe boni exitus confirmamur.

Dum solidissimum tuum ad motas Amico Benedictino difficultates contra Harmoniam praestabilitam relego responsum, incidit forte dubitatio quam nec ab Amico nec a Baylio tangi video. Nempe: Ex Harmonia corporis et animae praestabilita prorsus sequi videtur: si creatura quae tam perfecta condita foret, ut totius universi mechanismum perspectum haberet, fore ut non praesentia duntaxat arcana cordium sed et futura quaecumque libera (saltem ea quae naturae ordinem minime transcendunt) certo et infallibiliter cognosceret ac praesciret.

Vale Illustrissime Domine, et alia tibi non ingrata quae subinde ad manus meas devenient expecta. Dabam Coloniae Agrippinae 25 Martii 1710.

Illustrissimae Dominationi tuae

Devotus ex asse

Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Plurimum Reverende Pater

Fautor Honoratissime

Miraberis quod tamdiu officio defui, et me quoque pene pudet aliquid negligentiae fateri, sed cui accessere partim absentia partim incommoda valetudo. Sperabam etiam absolutionem libri mei in Batavis nuntiare posse, de qua tamen ab aliquot septimanis nihil intelligo etsi maximam partem impressam acceperim.

Puto me primae Tuae Epistolae Colonia 18 Jan. datae respondisse, ubi de vocibus consecution, et contradistingué monebas. Et sane posterior melius abesset si quid iudico. Veroniana methodus non meretur ut quisquam ejus tutelam suscipiat. Est merus Logicae abusus. Nicolius eam nonnihil immutavit, quamquam et revera in suo de Ecclesia opere nihil magni praestiterit. Si argumenta hujusmodi Aristotelico more ad formam Logicam redigantur, statim concidunt. Atque ideo Logicam Aristotelicam merito laudo.

33. Des Bosses to Leibniz¹

[Cologne, 25 March 1710]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

Eight days ago I recounted a few bits of news about the Chinese affair. Now I am sending those things that have reached us, partly from Rome, partly from elsewhere, which strengthen our hope of a good outcome.²

When I reread your most convincing reply to the objections raised by our Benedictine friend against the preestablished harmony, there occurred to me a doubt that I do not see mentioned by him or by Bayle.³ It is this: from the preestablished harmony of body and soul it seems to follow straightforwardly that if some creature were made so perfectly that it had a mechanism that perceived the entire universe, it would certainly and infallibly know and foreknow not only the present secrets of hearts but also any future free acts (at least those that do not in any way transcend the order of nature).

Farewell, most distinguished Sir, and expect to receive other worthwhile items that now and then come into my hands. From Cologne, 25 March 1710.

Your Excellency's completely devoted
Bartholomew Des Bosses, S.J.

34. Leibniz to Des Bosses¹

[Hanover, 2 May 1710]

Most Reverend Father, Most Honored Supporter,

You will be surprised that I have neglected my duty for so long. I am almost ashamed to confess also to some thoughtlessness, although both absence and ill health have contributed to my silence.² I was hoping that by now I would be able to announce the publication of my book in Holland; however, I have heard nothing about it for several weeks, although I have received most of it in page proofs.

I believe I replied to your first letter from Cologne, dated 18 January, in which you were cautioning me on the use of the words *consecution* and *contradistingué*. In my view, it certainly would be better to drop the latter. The method of Véron does not merit anyone's reliance on it.³ It is a mere abuse of logic. Nicole altered it somewhat, although, in fact, in his work on the Church he proved nothing of importance.⁴ If arguments of this sort were reduced to their logical form, in the manner of Aristotle, they would collapse immediately. And for this reason, I praise the value of Aristotelian logic.

Prodiit in Batavis fasciculus cui titulus Memoires pour Rome sur l'Etat de la Religion Chretienne dans la Chine 1709. Sed omnes partes fasciculi ab autoribus sunt, vobis adversantibus: mihi tamen sententiam eorum nondum persuasere. Illud apparet Tournonium Cardinalem mandata Pontificia secutum esse: eoque magis Romanos perplexos esse, quod nunc obliquanda vela vident.

Liceti librum de ortu animae humanae nunquam censura confixum puto.

Si rationalitas animae sensitivae praeexistenti non superadditur miraculose, sequitur sponte, inde prodire per evolutionem naturalem.

In Liceto non probo, quod dicere videtur animam parentis penes partem vegetalem aut sensitivam dividi. Nam quaevis anima est indivisibilis.

Cum panis revera sit Ens per aggregationem seu substantiatum, ejus substantialitas in monadum unione consistet, itaque ad eam abolendam vobis non necesse est monades ipsas abolere.

Multipraesentia non habet opus replicatione aut penetratione dimensionum. Sed explicanda est per genus praesentiae nullam habens relationem ad dimensiones, velut si Deus efficeret, ut aliquid immediate operaretur in distans.

Non video quid prohibeat genios esse Ζῶα sed multo his quae novimus nobiliora. Animalium tamen nomen non bene convenit, quia ea speciem propagant.

Liber inscriptus l'Esprit des nouveaux Disciples de St. Augustin dudum ex Batavis mihi promissus est; sed causa Quesneliana tuo favore pergrata erit. Augustinum a Serrio defensum habeo.

Papissa nihil ad Antibailium, peculiare erit opusculum Latino sermone, cui titulus: Flores sparsi in Tumulum Papissae.

Pardiesii scripta Gallica Latine versa in Germania olim prodire, Jenae ni fallor, quae facile procurabit Bibliopola.

Gottignesius vester subtilis erat, sed saepe nodum in scirpo quaerebat.

Etsi Gregorius a S. Vincentio Quadraturam Circuli et Hyperbolae non absolverit, egregia tamen multa dedit.

A volume entitled *Memoranda for Rome concerning the State of the Christian Religion in China* appeared in Holland in 1709.⁵ But all the parts of the volume are by authors opposed to your order. I, though, am not yet persuaded by their view. It is clear that Cardinal Tournon has complied with the pontiff's orders; and those in Rome are all the more perplexed, because now those orders seem to have concealed his true intentions.⁶

I believe that Liceti's book on the origin of the human soul was never condemned by the censor.⁷

If rationality is not added miraculously to a preexisting sensitive soul, then it follows automatically from this that it appears by virtue of a natural evolution.

I do not approve of the fact that Liceti seems to say that the soul of the parent is divided into a vegetative part and a sensitive part. For any soul is indivisible.

Since bread, in fact, is a being by aggregation, that is, a substantiated being, its substantiality will consist in the union of monads. Accordingly, to destroy that union, on your view, it is not necessary to destroy the monads themselves.

Multipresence does not require the expansion or replication of dimensions. Rather, it should be explained through a kind of presence having no relation to dimensions, just as if God should bring it about that something operates immediately at a distance.

I do not see what prevents angels from being living things, though ones far superior to those with which we are acquainted. Nevertheless, the term "anima" is not well suited to them, since animals propagate a species.

The book entitled *The Spirit of the New Disciples of St. Augustine* was sent to me recently from Holland, but I shall be happy to take you up on your kind offer of the *The Quesnel Case*. I have Serry's defense of *Augustinus*.⁸

My work on the popess has nothing to do with that against Bayle; it will be a separate little book in Latin, with the title *Flowers Scattered on the Grave of the Popess*.

A Latin translation of the French writings of Pardies appeared some time ago in Germany—in Jena, if I am not mistaken. A bookseller will easily obtain it.⁹

Gottignies of your order was subtle, but often he found trouble where there was none.¹⁰

Although Grégoire de Saint-Vincent did not complete the quadrature of the circle and hyperbola, he nonetheless contributed many excellent things.¹¹

In Fasciculo Sinico apud Batavos edito lego patrem Videlou vestrum natione Gallum contra vestros pro Tournonio stare; id an verum sit, nosse velim, nam acceperam neminem vestrorum Gallorum Sinicae literaturae peritiorem esse. Addebatur eum ideo ex Sina ablegatum, jussu Monarchae. Itaque nosse velim, quo devenerit.

Titulus vel Conspectus Musei Kircheriani a Bonanno perplacet. Nec dubito quin multa ex eo discamus. Miror Patrem Bonannum adhuc tueri aequivocam generationem.

Gaudeo quod Tibi non displicent quae Patri Lamio Benedictino reposui.

Forsterus cum Patre Servatio Nathens Francofurti novissime locutus est, et hanc quam includo schedam mihi misit, ne Servatius vester Patribus vestris, sed Forstero ipsi librum transmissum imputet.

Circa juvenem Brunsvigo-Luneburgium Collegio Romano idoneum, redditum Smi Ducis Antonii Ulrici expectavi, eique jam reverso rem insinuavi. Responsum exspecto.

Quod superest vale et fave. Dabam Hanoverae 2 Maji 1710.

Deditissimus

G. G. Leibnizius

P.S. Literae quo rectius ad me perveniant, praestabit ad Hildesienses vestros curari et Dn. de Behrens commendari. Interdum enim Hanovera absum.

[Draft]

Hanovera

ad R. P. Des Bosses

Januar 1710

Admodum Reverende Pater

Fautor Honoratissime

Dubitabam de valetudine Tua, nunc gaudeo Te valere et mei meminisse. Novum munus, novum locum maximam temporis partem sibi vindicare facile intelligo. Gratias pro monitis. *Consecution* apud Gallos putem ferri posse, quia vox alia commoda deest, sed *contradistingué* rectius vertetur in *distingué*. Locum de Gersone et Rusbrokio consulam.

In controversiam de auctoritate Ecclesiae ingredi nolim, ne in prolixam discussionem venire necesse sit, multasque ambiguitates evolvere. Ars nova Veronii, Nihusii et similium, mihi olim inanis visa est; neque operae

In the volume on China published in Holland, I read that Father Visdelou of your order, a Frenchman by birth, stands in support of Tournon against your order. I should like to know whether this is true, for I had understood that none of the French members of your order have much training in Chinese literature. It was also mentioned that he was expelled from China for this reason, by order of the emperor. Accordingly, I should like to know where he has gone.¹²

The notice or prospectus for the Musaeum Kircherianum, published by Bonann, is most pleasing. No doubt we shall learn many things from it. I am surprised that Father Bonann still defends equivocal generation.¹³

I am happy that my response to Father Lamy, the Benedictine, did not displease you.¹⁴

Förster spoke with Father Servatius Nöthen of Frankfurt recently and sent me the sheet that I include, lest your Servatius should attribute the forwarded book to your fathers rather than to Förster himself.¹⁵

Concerning the capable Brunswick-Lüneberg youth at the Collegio Romano, I was awaiting the return of His Serene Highness Duke Anton Ulrich, and I informed him of the matter once he was back. I await a response.

For the rest, farewell and think kindly of me. From Hanover, 2 May 1710.

Most faithfully,

G. W. Leibniz

P.S. In order that letters reach me more directly, it will be best for them to be handled by your members in Hildesheim and entrusted to Mr. Behrens, for I am occasionally absent from Hanover.¹⁶

[Draft]

Hanover

To the Reverend Father Des Bosses

January 1710

Most Reverend Father, Most Honored Supporter,

I was uncertain about the state of your health. Now I rejoice that you are well and that you have remembered me. I understand that a new post in a new location easily demands most of your time. I am grateful for the suggestions. I believe that *consecution* can be supported in French, as there is no other suitable word, but it would be more correct to replace *contradistingué* with *distingué*. I shall consult the passages in Gerson and Ruysbroeck.¹⁷

I do not want to enter into a dispute over the authority of the Church, lest it be necessary to embark on a lengthy discussion and to clear up many ambiguities. The “new art” of Véron, Nihus, and the like seemed to me

pretium fuerit ista retexere. Et frustra Walenburgii talia defendere conati sunt, quorum olim in hanc rem opellas legi. Baylio credo placuissent, Scepticismi amatori, sed qui contrariam inde conclusionem duxisset.

Si rationalitas animae sensitivae praeexistenti non superadditur miraculose, sequitur inde sponte prodire per evolutionem naturalem, atque hoc volui cum dicerem inesse in actu signato. Si hanc phrasin minus commodam putas, aliam substituere licebit. Ex Liceti loco quaedam probo, alia non probo, nempe illud animam parentis penes partem vegetalem aut sensitivam dividi. Nam una est anima quaevis et indivisibilis, neque anima quae semini inest, animae paternae portio est. Liceti librum censura aliqua confixum non puto.

Cum panis revera non sit substantia sed ens per aggregationem seu substantiatum resultans ex innumeris monadibus per superadditam quandam Unionem, ejus substantialitas in hac unione consistit. Itaque non necesse est secundum Vos a Deo monades illas aboleri vel mutari, sed tantum subtrahi id per quod ens novum producunt, nempe Unionem, illam. Ita cessabit substantialitas in ea consistens, etsi maneat phaenomenon quod jam ex monadibus illis non orietur; sed ex aliquo divinitus substituto unioni illarum monadum aequivalente. Ita nullum aderit revera subjectum substantiale. Sed talibus nos non indigemus qui transsubstantiationem rejicimus.

Multipraesentia ejusdem corporis non habet opus replicatione aut penetratione dimensionum, sed explicanda est per praesentiae genus nullam habens ad dimensiones relationem. Et revera si Deus efficeret ut aliquid immediate operaretur in distans, eo ipso ejus multipraesentiam efficeret sine omni penetratione aut replicatione. Secundum nostros non dicitur includi pani corpus Christi, sed cum eo accipi, ubi nulla ad dimensiones alligatio necessaria est.

Non video quid prohibeat genios esse Ζῶα sed multo his quae novimus mobilia. An personam cum corpore suo constituent, pendet a natura unionis, quae est aliquid μεταφυσικόν, nec a nobis semper satis explicari potest.

De re Sinensi ad me perscriptum est pontificem singulari temperamento appellationes a Legato Turnonio ad sedem suam rejecisse, sed ipsam Turnonii sententiam nihil Alexandri VII decretis obsturam declarasse. Quod est verbo aut formula contra vestros pronuntiare, re et effectum pro illis.

useless in the past; it was not worth the effort to revive it. The Walemburgs, whose brief works on this topic I once read, tried in vain to defend such things.¹⁸ I believe they pleased Bayle, a lover of skepticism, but one who drew the opposite conclusion from it.

If rationality is not added miraculously to a preexisting sensitive soul, then it follows automatically from this that it appears by virtue of a natural evolution. And this is what I meant when I said it was contained in a designated act.¹⁹ If you think this expression is inappropriate, another may be substituted. I approve of some things in the passage from Liceti, but I do not approve of others, especially the claim that the soul of the parent is divided into a vegetative part and a sensitive part. For any soul is one and indivisible, and no soul in a sperm is part of the parent's soul. I do not believe that Liceti's book was condemned by any censor.

Since bread, in fact, is not a substance, but a being by aggregation, or a substantiated being resulting from innumerable monads through some added union, its substantiality consists in this union. Accordingly, it is not necessary, on your view, that those monads be destroyed or changed by God, but only that that through which they produce a new being be removed, namely, the union. In this way, the substantiality depending on it will cease, although there will remain the phenomenon, which now will arise not from those monads, but from some divinely substituted equivalent to the union of those monads. Thus no substantial subject will in fact participate. Yet those of us who reject transubstantiation have no need of such things.²⁰

The multipresence of the same body does not require the replication or penetration of dimensions, but should be explained through a kind of presence having no relation to dimensions. And in fact if God should bring it about that something immediately operates at a distance, by that fact he would bring about its multipresence without any penetration or replication. According to us, the body of Christ is not said to be included in the bread, but is received with it, where no connection to dimensions is necessary.

I do not see what prevents angels from being living things, though much more mobile than those with which we are acquainted. Whether they constitute a person with its body depends on the nature of the union, which is something metaphysical and cannot always be fully explained by us.

With regard to the Chinese situation, it has been reported to me that the pope, with a unique moderation, rejected the appeals to the Vatican from his legate Tournon, yet declared that Tournon's judgment itself shall in no way be opposed to the decrees of Alexander VIII. This is to pronounce against your order in word or formula, but for it in reality and in effect.

Liber inscriptus *l'esprit des nouveaux disciples de S. Augustin*, ex Batavis jam mihi missus est. Sed Causa Queneliana tuo favore impetranda pergrata erit. Pretium docebis. Augustinum contra Launoium defensum a Serrio habeo. Sed ajunt Launoium scripti posthumi autorem non fuisse.

Papissa nihil ad Antibailium. Libenter intelligo Codicem Martini Poloni unde abest, apud vos extare. Pardiesii scripta Gallica latine versa in Germania prodire, quae facile procurabit Bibliopola. Chalesius vester non spernendus est: in eo peccavit, quod analysin profundiore quam non intellexit sprexit. Ozannami Algebra non est contemnenda. Gottigniesius vester, vir quidem subtilis, interdum in scirpo nodum quaerere visus est. Etsi Gregorius a S. Vincentio Quadraturam Circuli et Hyperbolae non absolverit, multis tamen pulcherrimis veritatibus Geometriam auxit; itaque plurimum ei debemus. Quod superest Deum in his anni auspiciis precor, ut Te nobis in multos annos florentem servet. Vale et fave.

Des Bosses to Leibniz

Illustrissime vir patrone colendissime

Cum expectatissimas Tuas litteras accepi 2 Maji datas (nam alias a Te vidi nullas) ad academicos me gradus comparabam, et futurum videtur ut a Mathematicis carceribus vice digressus cursum abrumpere, et ad Theologiam animum appellere cogar. Gratias interim ago pro insignium quos suggeris Mathematicorum notitia, quae si non mihi, saltem aliis usui esse poterit. Hac, quam dixi, cura defunctus nihil habui prius quam Tibi respondere. Si vera sunt quae novissime Roma nunciantur, Sinensis ecclesiae fata brevi patebunt. Nam dum P. Raimundus noster, Provanae socius Clementi XI vetera Christianae religionis monumenta non ita pridem in Sinis reperta, et inter ea Decalogum a pluribus saeculis Sinice redditum in quo *Deus* vocabulo celebri *Tien* exprimebatur, nuper exhiberet; fertur Pontifex dixisse, se 15 Maji toti huic negotio finem impositurum, neque enim se missionem istam pessum ire velle. De Patre Visdelou legi, ni fal-

The book entitled *The Spirit of the New Disciples of St. Augustine* has already been sent to me from Holland. But I shall be happy to take you up on your kind offer of the *The Quesnel Case*; let me know the price. I have Serry's defense of *Augustinus* against Launoy; however, it is said that Launoy was not the author of the posthumous work.²¹

My work on the popess has nothing to do with my book against Bayle. I am glad to hear that the manuscript of Martin Polonus, which differs from my work, is found in your library.²² A Latin translation of the French writings of Pardies appeared in Germany; a bookseller will easily obtain it. Dechales, of your order, should not be scorned: he made a mistake in expressing scorn for a rather profound analysis that he did not understand. Ozanam's *Algebra* should not be disparaged.²³ Gottignies of your order was indeed a subtle man but sometimes seemed to find trouble where there was none. Although Grégoire de Saint-Vincent did not complete the quadrature of the circle and hyperbola, he nevertheless enriched geometry with many exceedingly beautiful truths; accordingly, we owe him much. For the rest, I pray at this beginning of the year that God may preserve you for us in an excellent state for many years to come. Farewell and think kindly of me.

35. Des Bosses to Leibniz¹

[Cologne, 14 June 1710]

Most Distinguished Sir, Most Esteemed Patron,

When I received your much-anticipated letter dated 2 May (for I have seen nothing else from you), I compared my progress to that of the academics, and it seems that given the difference I shall have to break off the course at introductory mathematics and direct my attention to theology. In the meantime, thank you for the knowledge of the extraordinary mathematicians whom you suggest, which will be useful, if not to me, then at least to others. Having completed the task of which I have spoken, I had nothing to reply to you earlier. If what has been announced most recently in Rome is true, the fate of the Chinese church will shortly be clear. For when our Father Ramón,² the comrade of Provana, recently showed to Clement XI that old traces of the Christian religion were discovered not so long ago in China, and among these the fact that for many centuries the decalogue has been recited, in which "God" is expressed by the honored word *Tien*, the pope was moved to say that he would impose an end to all negotiations on 15 May, for he did not want this mission to go under. Unless I am mistaken, I read in some apology by our French members that it

lor in quadam Gallorum nostrorum apologia, falsum esse quod a caeteris nostris discreparet, maxime postquam decretum ipsum a Turnonio allatum perpendere licuit, in quo controversia facti, an scilicet ritus Sinici tales revera sint quales in suo mandato depinxerat eos Illmus Maigrotius, indecisa relinquitur, uti ex ipsius decreti tenore videntur evincere Apologiae nostrorum, quidquid sit de mandatis occultis quae Turnonio dedisse potuit Clemens XI.

An porro Salomon noster dum matres duae de puero contendunt, ei cuius *viscera commota sunt super puero*, causam adjudicaturus sit, eventus dabit. Timemus quidem sed magis speramus. Praga intelleximus, praecipua quae in nostrorum defensionem italice vel gallice scripta sunt opuscula latine reddita ibidem esse sub praelo.

Licet circa compositionem quandam animae humanae e partibus seu gradibus tibi consonat. Divisionem animae quam astruit, in sensu metaphysico intellectam tibi non probari sciebam sed si physice et ad sensum sumatur non repugnabit placitis tuis sic enim et anima plantae matricis dividi censetur in animas propaginum, quia hae in matrice latentes tandem se exserunt.

Cum panis substantiam in Eucharistia interire profitemur, non solam ejus formam quae utique in modalitate quadam consistit, cum panis ens sit per aggregationem, destrui volumus, sed etiam propriam panis materiam. Itaque et monades saltem tritico propriae interire dicendae erunt. Quod a principiis tuis non disrepat, cum monades illae quantumvis multae massam non faciant. His monadibus sublatis si corporis Christi monadas substituas easque extensione sua quae ipsis essentialis non est, spoliatas, habebimus opinor hoc pacto panis in Christi corpus conversionem sat catholice explicatam. Vide si placet ea quae contra Cartesii ad quartas hac de re objectiones responsionem obmovet autor *Itineris per mundum Cartesii* prope fine partis secundae pag. mihi 132 et seqq. Quae quantumlibet valida adversus Cartesium censeam, non tamen contra sententiam tuam hoc modo explicatam militat.

Circa multipraesentiam haec occurrunt. Primo si ad praesentiam sufficiat operatio sine respectu ad dimensiones, efficere Deus non poterit ut aliquid operetur in distans, nam operatio hoc ipso rem operantem praesentem sistet. Deinde spiritus vel animae rationalis praesentia sine respectu

was false that Father Visdelou³ disagreed with the rest of our society, especially after he was allowed to examine the decree pronounced by Tournon, in which the question of fact—namely, whether the Chinese rites really are such as the most distinguished Maigrot⁴ depicted them in his order—remains undecided, as our apologies seem to show from the tenor of the decree itself, whatever is true of the secret orders that Clement XI might have given to Tournon.

The outcome will show whether, in the future, when two mothers fight over a boy, our Solomon will be able to adjudicate the case in favor of her whose “bowels yearned upon the boy.”⁵ We are indeed afraid, but we are still more hopeful. We have heard that in Prague the excellent works written in Italian and French in our defense have been translated into Latin and are in press.

Liceti agrees with you concerning a kind of composition of the human soul from parts or degrees. I knew that you did not approve of the division of the soul, which he adds, understood in a metaphysical sense; but if it is taken physically and with respect to the senses it will not oppose your principles. For in this way the soul of the original plant is thought to be divided in the souls of the offspring, since those things hidden in the parent show themselves in the end.

When we say that the substance of the bread perishes in the eucharist, we mean that there is destroyed not only its form, which consists at any rate in some kind of modality, since the bread is a being by aggregation, but also the matter proper to the bread. And so it will have to be said that at least the monads proper to the wheat perish. This does not differ from your principles, since these monads, no matter how many, do not make up the mass. With these monads removed, if you substitute the monads of the body of Christ deprived of their extension, which is not essential to them, I believe that in this way the conversion of the bread into the body of Christ will be explained sufficiently well for the Catholic church. Please look at what the author of *Journey to the World of Descartes*⁶ produces as a response to four objections concerning this issue toward the end of part two, pages 132 and following in my copy. I think these points are very effective against Descartes but do not work against your view explained in this way.

The following things occur to me concerning multipresence. First, if an operation without respect to dimensions suffices for presence, God will not be able to bring it about that something operates at a distance, for the operation by this thing itself causes the operating thing to be present. Next, it seems that the presence of a spirit or a rational soul cannot be explained

ad corpus vel ejus dimensiones explicari non posse videtur, igitur nec unius corporis ad alterum praesentia. Adde quod unius corporis in alterum operatio tuis principiis dissonat. Praeterea, si recte memini, Newtoni et aliorum operationem in distans admittentium sententiam alicubi improbas. Denique similem multipraesentiam sustinere poterit Cartesius (imo et Calvinus) cum tamen in quadam ad Pelissonium Epistola, Cartesii principiis realem praesentiam everti censeas.

Memini in alterutro epistolio meo postremo Tuam de quodam Harmoniae praestabilitae consecratio quaesivisse sententiam de quo quid Tibi videatur gratum erit intelligere. De juvene quoque, quem Ptolemaeus optabat, quid Serenissimus Dux responderit, intelligere cupio, nam propediem scribam ad Ptolemaeum, cui in votis est Serenissimo gratificari. Non ego solum sed et alii multi, Antibaeliani operis Tui evulgationem avidè expectamus his in locis.

Causam Quesnellianam, quae rara esse incipit, etiam in Belgio, faxo ut habeas, quanquam quartus tomus sive continuatio libri cui titulus *Le véritable esprit des nouveaux disciples de S. Augustin*, necdum a Te visa tota fere est de Quesnellio.

Ad curandam tui de Papissa opusculi editionem, si res adhuc integra est, opellam meam offero. Vale Vir illustrissime et sinceræ preces, quas aliquot jam ab annis pro salute et incolumitate Tua quotidie tacitus ad Deum fundo, boni console. Dabam Coloniae Agrippinae 14 Junii 1710.

Illustrissimae Dominationi tuae

Devotissimus

Bartholomaeus Des Bosses SJ

Post scriptas litteras audio ea quae superius de Sinico negotio scripsi, Roma confirmari et insuper addi: Pontificem maxima cum affabilitate Patri Raymundo Lusitano respondisse, se propediem ad arcem Castelgandolphinam animi relaxandi causa profecturum, ibidemque Adm R^o Pri nostro Praeposito Generali mentem suam denique circa causam Sinensem declaraturum: Ex quo conjiciunt Romani causam illam in congregatione S. Officii recens esse definitam.

Leibniz to Des Bosses

R^{me} Pater Fautor Honoratissime

Gaudebo, ubi missionem Sinensem extra periculum positam intellexero, ne progressus ejus ob scrupulos sistatur qui non magni momenti vi-

without relation to a body or its dimensions, and consequently neither can the presence of one body in another. Add to this the fact that the operation of one body on another is not in accord with your principles. Furthermore, if I remember correctly, you disapprove elsewhere of the doctrine of Newton and of others who admit an operation at a distance. Finally, Descartes (and even Calvin) will be able to maintain a similar multipresence, despite the fact that in a certain letter to Pellisson⁷ you insist that real presence is subverted by Cartesian principles.

I remember having asked in one of my last letters for your view concerning a certain consequence of preestablished harmony. I shall be grateful to know what you think about this. I also want to know the most serene duke's response regarding the youth whom Tolomei selected, for I shall write soon to Tolomei, who is to gratify the duke in his wishes. Not only I but also many others in these parts are avidly looking forward to the publication of your work against Bayle.

I shall see to it that you have *The Quesnel Case*, which is beginning to be scarce even in Belgium, though the fourth volume or continuation of the book entitled *The True Spirit of the New Disciples of St. Augustine*, which you have not yet seen, is almost entirely about Quesnel.

I offer my humble efforts to take care of the publication of your book on the popess, provided the work is already finished. Farewell, most distinguished Sir, and look with kindness on the sincere prayers I have uttered in silence to God every day during the last few years for your health and safety. From Cologne, 14 June 1710.

Your Excellency's most devoted
Bartholomew Des Bosses, S.J.

After having written this letter, I hear that the things I wrote above concerning the Chinese negotiations are confirmed in Rome, and I also add the following: the pope responded with the greatest affability to Father Ramón Arxo that he would soon set out to Castel Gandolfo⁸ for a respite and there would declare fully at last to the reverend father, our superior general, his opinion concerning the Chinese matter. From this the Romans conclude that this matter was recently settled in a meeting of the Holy Office.⁹

36. Leibniz to Des Bosses¹

[Hanover, 2 July 1710]

Most Reverend Father, Most Honored Supporter,

I shall be happy when I have learned that the Chinese mission has been kept out of danger, lest its progress be stopped on account of difficulties

dentur. P. Kircherus olim edidit monumentum Christianismi Sinensis veteris. Quibusdam novitatis subjectum visum est, puto tamen autoritate Romae non cariturum, si inde sumtus est locus decalogi in quo Deus vocatur Tien. Sparsus erat rumor, nolle Monarcham Sinensem ut imposterum Christiani Europaei apud Sinas degentes penderent ab extranea autoritate, sed hoc verum esse non puto.

Corpus quod in distans immediate operaretur, esset praesens alteri non dimensionaliter, seu circumscriptive, sed ubicative et substantialiter; immeditatione substantiae non dimensionum, quarum distantia conservaretur, id mihi videtur commodius quam statuere multipraesentiam replicativam, cujus de possibilitate nolim disputare; nec tamen video cur huc confugere necesse sit. Operationem corporis naturalem in distans utique improbo; supernaturalem non aequo.

Vir quidam honestus ex Cellensi tractu ad vestram communionem ante annos aliquot transiit, et nunc Hildesii Advocatum in Tribunali supremo agit. Ejus filius, non vulgaris spei adolescens, ut intelligo, studiis in Collegio vestro dans operam, visus est dignus qui commendaretur ad obtinendum in Collegio Romano locum, nec alium invenimus aptiorem. Accipis hic testimonium Reverendi Patris ex vestris, cui noti sunt ejus mores, noti profectus, rogoque ut illud R^{mo} Patri Ptolemaeo cum multa mei commendatione transmittas. Utinam illi satis virium annorumque largiatur Deus, ut praeclaris coeptis defungi possit.

Rogo ut memineris consilii de viro aliquo docto et Historiae Ecclesiasticae pariter ac Theologiae Scholasticae perito insigniter et adhuc aetate florente animando ad Historiam dogmatum a Petavio et Tomassino coeptam sed per Scholasticos ad nostra usque tempora continuandam. Jucundum illud simul atque utile foret; ibi simul fata philosophiae interserenda essent. Habemus aliquam antiquae philosophiam, sed mediae fere nullam.

R. P. Janningius innuere videtur vitam Roberti de Aspero periisse, de quo doleo, quia nescio an recuperari aliunde possit.

Flores in Tumulum papissae sparsos docto cuidam chronologo mittere promisi, ut suas observationes mecum communicet, nec ante de editione cogitare potero.

that seem to be of no great importance.² Some time ago Father Kircher published a record of ancient Chinese Christianity.³ It seemed to some a subject of novelty, but I think that Rome will not lose authority if it is assumed on the basis of this that there is a place in the decalogue in which God is called *Tien*. The rumor was spread that the Chinese emperor did not want European Christians living among the Chinese to depend upon an external authority, but I do not think that this is true.

A body that operated immediately at a distance would not be present in another dimensionally, or at its boundaries, but throughout it and substantially; it seems to me easier to uphold this by the immediacy of substance—not of dimensions whose magnitude is conserved—than to uphold replicative multipresence, the possibility of which I do not want to dispute; but I do not see why it is necessary to take refuge in this. I certainly disapprove of the natural operation of a body at a distance, but not to the same extent the supernatural operation.

A certain gentleman from the area of Celle passed through your community a few years ago and now works in Hildesheim as a lawyer at the supreme tribunal. His son, a young man of uncommon promise, as I understand it, is pursuing studies in your college, and he seems worthy of being recommended for a place at the Collegio Romano; we have found no one more suitable. When you receive the relevant testimony of the reverend father of your order, to whom his moral conduct and successes are known, I ask that you send it to the Most Reverend Father Tolomei with my highest recommendation. Would that God would bestow upon him sufficient energy and years that he could finish the splendid things he has begun!

I ask that you remember the plans of a certain learned man, remarkably knowledgeable about Church history and Scholastic theology alike, and still flourishing in old age, who was inspired to continue the history of dogmas begun by Petau⁴ and Thomassin⁵ through the Scholastics all the way to our time.⁶ This would be at once a pleasing thing and useful; the fates of philosophies would have to be introduced there at the same time. We have some philosophy of the ancient world but virtually none of the intervening period.⁷

R. P. Janninck seems to suggest that he has lost the *Life of Robert de Aspero*. I am sorry about this, since I do not know whether it can be obtained elsewhere.

I promised to send *Flowers Scattered on the Grave of the Popess* to a certain learned historian, so that he might communicate his observations to me, and I shall not be able to think about publication before doing so.

Non memini quale sit Harmoniae praestabilitae corollarium, de quo meam sententiam quaesisse dicis. Quod superest vale et fave. Dabam Hanoverae 2 Julii 1710.

Deditissimus

G. G. Leibniz

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Tametsi adolescens de quo scribis, ob annorum et studiorum immaturitatem necdum ad Collegium germanicum admitti potest, cum statuta annos saltem 16, et litterarum humaniorum curriculum confectum in futuris alumnis, etiam perillustribus exigant, spero tamen Eminentissimos protectores Tua Serenissimique Ducis gratia legibus illis derogaturos, itaque commendationem tuam ad Ptolemaeum transmisi una cum fragmento epistolae Tuae de concinnanda Scholastica Historia quod consilium tuum alias a me significatum ipse magnopere probavit. Ad hanc provinciam Itali, Galli ac Hispani qui libris necessariis et otio abundant, magis fortasse idonei sunt quam nostrates.

Ad tuam multipraesentiae explicationem nihil ultra habeo quod regeram neque nos Christi corpori in Eucharistia circumscriptivam praesentiam tribuimus, sed cum replicari idem nobis sit quod plura disparata ubi quocunque modo habere, et Christi corpus substantialiter et ubicative adesse in Eucharistia fatearis, patieris credo nos Christi corpus substantialiter et ubicative replicatum et cum panis dimensionibus penetratum dicere.

Consectarium quod ex Harmonia praestituta deduci posse videbatur, hoc erat: si liberis nostrae mentis actionibus motus corporis sola necessitate mechanica sine ullo mentis influxu consequentes ad amussim respondeant; jam soli Deo propria non erit humani cordis arcanorum et futurorum libere contingentium scientia cum mens aliqua create tam vasta tamque nobilis extare possit quae totius universi mechanismum penitus et *adaequate* perspectum habeat. Ex hac notitia omnes, qui sunt quique erunt, motus corporum pervidebit ac praevidebit, non aliter atque as-

I do not remember what sort of corollary to preestablished harmony it was about which you say you sought my opinion. For the rest, farewell and think kindly of me. From Hanover, 2 July 1710

Most faithfully,
G. W. Leibniz

37. Des Bosses to Leibniz¹

[Cologne, 18 July 1710]

Most Distinguished Sir, Most Revered Patron,

Although the young man about whom you wrote cannot yet be admitted to the German College on account of his youth and the immaturity of his studies—since the statutes require that prospective students, even the most brilliant, be at least sixteen years of age and have completed the curriculum of humane letters—I nonetheless hope that the most eminent precepts will suspend these rules for your sake and for the sake of the most serene duke. And so I have passed along your recommendation to Tolomei together with a fragment of your letter about producing a history of Scholasticism, because he approved strongly of your plan when I showed it to him on another occasion.² Italy, France, and Spain, which abound in the necessary books and leisure, are perhaps more suitable for this undertaking than our lands.

I have nothing more that I want to say in response to your explanation of multipresence; we do not attribute a circumscribed presence to Christ's body in the eucharist either, but since being replicated is the same for us as having many distinct things anywhere in whatever way, and since you acknowledge that the body of Christ is substantially and everywhere present in the eucharist, I believe you will allow us to say that the body of Christ is replicated substantially throughout it and penetrated with the dimensions of the bread.

The conclusion that seemed deducible from preestablished harmony was this: if the motions of the body, which follow one another solely by a mechanical necessity without any influence of the mind, correspond exactly to the free actions of our mind, then the knowledge of the secrets of the human heart and of free future contingents will not be peculiar to God alone, because some created mind sufficiently vast and noble may exist, which has a perspective on the mechanism of the whole universe completely and *adequately*. From this knowledge the mind will discern and foresee all the motions of bodies that are and that will be, no differently from astronomers, who, having discerned the mechanism of the heavens

tronomi quibus coeli mechanismus ex pacto perspectus est, futuros planetarum motus exacte praesagiunt. Hoc si dederis, jam certe et omnes mentium humanarum actiones liberas, etiam futuras, utpote motibus illis corporeis respondentes prospicere certo poterit. Sicuti si constaret duae Horologia, alterum Europaeum, Americanum alterum accurate sibi invicem congruere semper, ubi Europaei statum novero, ejus quoque, quod in America est, constitutionem habuero perspectam.

Causam Quenellianam tradidi puellae cuidam paucos intra dies Hildesium praefecturae inde a nostris ad Te mittendam.

Questus est et mihi P. Janningus Vitam Roberti ad se non pervenisse et tamen litteras meas quas communi cum codice involuero clausas miseram accepisse se scribit. Fraudem alicujus Malevoli hic subesse suspicor. Auriga qui caeteroqui probis audit, utriusque conspectum fugit, a me Coloniae, a Janningo Antverpiae sollicitè perquisitus hucusque deprehendi non potuit.

Et ego quoque exemplar tui de ritibus Sinensibus scripti exemplar infortunio nescio quo amissum lugeo. Magisque lugerem nisi iacturam hanc favore tuo reparabilem esse nossem. Rem mihi gratissimam feceris si illud rursus exscribendum ad me proximis Tuis litteris includere volueris. Nova Sinensia variis ex locis ad nos recens allata in annexo folio leges. Vale Vir Illustrissime. Dabam Coloniae 18 Julii 1710.

Illustrissimae Dominationi tuae

Devotissimus cliens

Bartholomaeus Des Bosses SJ

P.S. Ubi P. Noël ad nos venerit, hac enim Montes Hannoniae petenti transeundum erit, habebō fortasse plura quae Tibi scribere possim.

Leibniz to Des Bosses

Admodum Reverende Pater

Fautor Honoratissime

Placet quod Replicationem Multipraesentiae ita exponis, ut rei non sit, sed ubietatis; sed ita ni fallor non admodum commode mentem loquentium exprimit. Nec video etiam cur opus sit penetratum cum panis dimensionibus corpus Christi dicere, cum dimensiones hanc ubicationem non ingrediantur. Sed re commode explicata de phrasibus possumus esse faciles.

in this manner, presage exactly the future motion of the planets. If you yield on this point, then surely it will also be possible to discern with certainty all free actions of the human mind—even those in the future—inasmuch as they correspond to the motions of the body, just as if two clocks were established, one in Europe, the other in America, to coincide accurately always with each other; when I knew the state of the European clock, I would have perceived the state also of the one in America.

I have given *The Quesnel Case* to a girl who will be setting out for Hildesheim within a few days; it will then be sent to you by my colleagues there.

Father Janninck also complained to me that the *Life of Robert de Aspere Monte* did not reach him, and yet he writes that he did receive my letters that I sent to the community hidden with the wrapped-up book. I suspect that the deceit of some malevolent person is lurking here. The coachman, who somehow knows of these ignominious acts, avoids the sight of both of us; although we have sought him diligently, neither I in Cologne nor Janninck in Antwerp has been able to find him.

I also lament that the copy of your essay on the rites of the Chinese³ was lost by some unknown misfortune; I would have regretted it more except that I knew that this loss was reparable by your good favor. You would make me very happy if you would have it copied out again and included in your next letter. On the attached sheet you will read the Chinese news recently brought to us from various places.⁴ Farewell, most distinguished Sir. From Cologne, 18 July 1710.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, S.J.

P.S. When Father Noël comes to us I shall perhaps have many things that I can write to you, for on this journey he will have to pass through Mons-Hainaut.⁵

38. Leibniz to Des Bosses¹

[Hanover, 4 August 1710]

Most Reverend Father, Most Honored Supporter,

I am pleased that you explain the replication of multipresence in such a way that it is not of the thing but of its location; but, unless I am mistaken, in this way it does not express very well the intention of those who speak of it. I further do not see why it must be said that the body of Christ is penetrated with the dimensions of the bread, since the dimensions do not enter into this locality. But, when the matter is explained properly, we can be accommodating in how it is expressed.

Objectionem quam nuperrimae Tuae contra Harmoniam praestabilitam continent, in prioribus non observaveram; nam alioqui respondissem statim, cum ex earum sit numero, quibus maxime delector, quod rei uberius illustrandae occasionem praebent.

Id ipsum nempe, quod Mundus, materia, mens, a finita mente perfecte comprehendi non debeant, inter caetera argumenta mea est, quibus probo, materiam non ex atomis componi, sed actu subdividi in infinitum; ita ut in qualibet particula materiae sit mundus quidam infinitarum numero creaturarum. Si vero Mundus esset aggregatum atomorum posset accurate pernosci a Mente finita satis nobili. Porro quia nulla pars materiae perfecte cognosci a creatura potest, hinc apparet nullam etiam Animam perfecte ab ea cognosci posse, cum per harmoniam illam praestabilitam exacte materiam repraesentet[;] itaque quod objectio Tibi visum est, argumentum videri potest in rem meam.

An schedam meam rursus desideras, in qua sententiam meam nuper explicui de controversia Sinensi? Si ea est mens Tua, requiram inter fasciculos chartaceos et erutam rursus submittam. Sed non possum statim promittere ob confusionem chartarum, quibus me defunctum puto.

Gratissimum erit discere quae porro de Sinensibus a P. Natali et aliis habebis. 16 volumina Sinensia Typis impressa ante annos aliquot misit mihi R. P. Bouvetus, sed literae ejus periire, ut adeo ignorem quid his voluminibus contineatur. Ita Thesaurus est absconditus. Scripsi plus semel literasque in Galliam curandas misi, sed nullum responsum tuli; et ex quo R. P. Verjusius obiit nonnihil negligor a Gallis vestris. Si favore aliorum amicorum responsum a R. P. Bouveto obtinere possem, eo quoque nomine Tibi obligatus forem. Non pauca alia et mea et amicorum quaesita in literis ad Bouvetum meis continebantur. Sed responsum nullum tulimus.

Quod superest vale et fave. Dabam Hanoverae 4 Augusti 1710.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Etsi fortasse imperator Sinarum commode non possit Edictum publicare de significatione vocis *Tien*, fortasse tamen indirecta aliqua ratione, sed authentica poterit ea de re aperire mentem suam.

I had not noticed in your previous letter² the objection that your latest letter contains against preestablished harmony; for otherwise I would have responded right away, since it is the kind of objection that delights me most, offering the occasion to illustrate the matter more fully.

The very fact that the world, matter, and the mind are bound not to be comprehended³ perfectly by a finite mind, is one of the arguments, among others, by which I prove that matter is not composed of atoms, but is actually subdivided into infinity, so that in any particle of matter there is a certain world of creatures, infinite in number. If in fact the world were an aggregate of atoms, it could be accurately examined by a sufficiently elevated finite mind. Furthermore, because no part of matter can be known perfectly by a creature, it appears from this that no soul can be perfectly known by a creature either, since the soul represents matter exactly by this preestablished harmony. Thus what seemed to you an objection can be seen as an argument for my position.

Is it the sheet on which I recently explained my view concerning the Chinese controversy that you wish to have again? If this is what you want, I shall search among my papers and send it back to you when I have dug it up. But I cannot promise that it will be right away, because of the disorder of my papers, which I think I must take care of.

I shall be very happy to learn whatever else you hear concerning the Chinese affair from Father Noël and others. The Reverend Father Bouvet⁴ sent me sixteen volumes in Chinese characters printed several years ago, but his letter has vanished, so I do not know what may be contained in the volumes. Thus is a treasure hidden. I wrote more than once; I sent a letter to France to take care of the matter, but I received no response; and because the Reverend Father Verjus⁵ died, I am somewhat neglected by your French colleagues. If I could obtain a response from the Reverend Father Bouvet through the favor of other friends of yours, I would be obliged to you. Many other things were contained in my letter to Bouvet, both my questions and the questions of friends. But we received no response.

For the rest, farewell and think kindly of me. From Hanover, 4 August 1710.

Most faithfully,
Gottfried Wilhelm Leibniz

P.S. Although the emperor of China could not perhaps easily publish an edict concerning the meaning of the word *Tien*, perhaps he could still show his view on this matter in some indirect but authoritative way.

Des Bosses to Leibniz

Illustrissime vir Patrone Colendissime

Causam Quenellianam cum adjecta Theodori Eleutherii Epistola curiosa dudum ad Te pervenisse spero. Litteras Tuas Orbano et Hartsoeckero ipse tradidi. Hartsoeckeri responsum Hildesio ad Te curavi. Orbanus habere se ajebat quae ad te mitteret. Haec ubi accepero, addam quaedam opuscula de Sinicis rebus quae lubens videas. Roma intelleximus post coniectos in carcerem factionis contrariae viros duos, D. Maillé et D. Des Champs, spem sententiae peremptalis affulgere majorem indies.

P. Natalis Pragae moratur adhuc, evulgandis latine documentis causam Sinicam spectantibus intentus.

Quod de Bouveti litteris quereris, perscripsi Romam et Lutetiam. Utinam et absolutam Antibaylii tui editionem nunciare potuissem. Ohe! quousque tollis animam nostram!

Quod ad objectionem nuperam respondes, mihi non penitus improvisum accidit et perplacet. At vereor extitutum aliquem qui Tuis ingratiis copulet illa duo principia, et Harmoniam quidem praestitutam a te mutetur, cum aliis vero sat multis incomprehensibilitatis attributum soli Deo tribuentibus creaturam quamlibet corpoream ab alia creata mente satis nobili comprehendere, et penitus pernosci posse contendat. Sed vitio Tibi dandum non est, neque novum ex opinionum quae seorsim spectatae probabilitatem habent, conjunctione monstra nasci. Praeterea, quid si dicat aliquis infinitatem creaturae nihil obstare quominus a creata mente, quae et ipsa infinita sit, comprehendere queat.

De *replicatione* quantum assequor, nihil habeo quod disputem, quando in re ipsa convenimus. Vale, Illustrissime Domine, et si quae habes quae Trivultiano Diario idonea putes, mitte ad me subinde, nam viam diu quaesitam demum reperi. Dabam Coloniae Agrippinae 11 Octobris 1710.

Illustrissimae Dominationi tuae

Devotissimus et obsequentissimus

Bartholomaeus Des Bosses SJ

P.S. Dum has scriberem, adest quidam notus qui Guelfebyti nuper a te benevole exceptus et per celeberrimam bibliothecam deductus salutem mihi refert ex te longe gratissimam. Ego vero pro exhibita illi humanitate utriusque nomine tibi etiam atque etiam ago gratias.

39. Des Bosses to Leibniz¹

[Cologne, 11 October 1710]

Most Distinguished Sir, Most Respected Patron,

I hope that *The Quesnel Case* along with the curious letter from Theodorus Eleutherius² that was included with it reached you a while ago. I myself sent your letters to Orban and Hartsoeker. I took care of Hartsoeker's response to you in Hildesheim.³ Orban said that he had some things that he would send to you. When I have received these, I shall add some writings on Chinese matters that you will enjoy seeing. Following the imprisonment of two men from the opposing faction, Fathers Maillé and Des Champs, we have learned from Rome that the hope of annulling the sentence appears greater daily.

Father Noël is still delayed in Prague, attending to the publication in Latin of the documents that concern the Chinese affair.⁴

I have recounted to Rome and Paris your complaint about Bouvet's letter. Would that I could also have announced the completed publication of your work against Bayle. O, how long you keep us waiting!

What you say in response to my recent objection was not wholly unexpected, and it pleases me greatly. But I fear that someone will appear who joins these two principles, and indeed borrows preestablished harmony from you against your will; with sufficiently many others assigning the attribute of incomprehensibility to God, he may assert that any corporeal creature can be comprehended and thoroughly known by another created mind that is sufficiently elevated. But it should not be ascribed to you as a vice or as something new that monstrosities arise from the conjunction of opinions that are credible when considered separately. Besides, what if someone should say that the infinity of a creature does nothing to prevent its being able to be comprehended by a created mind, which itself is also infinite?

As far as I understand "replication," I have nothing to add, since we agree on this matter. Farewell, most distinguished Sir, and if you should have something that you think is appropriate for the *Mémoires de Trévoux*, send it to me right away, for I have finally found the channel so long sought after.⁵ From Cologne, 11 October 1710.

Your Excellency's most devoted and humble
Bartholomew Des Bosses, S.J.

P.S. While I was writing this, a certain acquaintance arrived who was received kindly by you not long ago in Wolfenbüttel and was conducted through the celebrated library, and who passes along greetings to me from you from afar. Assuredly, I thank you again and again in the name of us both for the kindness you showed to him.

Quesnellianam controversiam, munus a te luculentum, accepi dudum, idque significatum a me gratiasque actas putabam. Sin minus, faciamus, ut par est. Amicum tuum Guelfebyti videre memini. Utinam saepe occurrerent, in quibus tibi affectum meum probare possem!

Placet, quod objectioni Tuae responsio mea, praesertim non omnino improvisa satisfacit. Qui Harmoniam praestabilitam admittet, non poterit non etiam admittere doctrinam de divisione Materiae actuali in partes infinitas. Sed idem aliunde consequitur, nempe ex natura motus fluidorum, et ex eo quod corpora omnia gradum habent fluiditatis.

Incomprehensibilitatis attributum utinam soli Deo proprium esset, major nobis spes esset noscendae naturae, sed nimis verum est nullam esse partem naturae, quae a nobis perfecte comprehendere possit, idque ipsa rerum περιχώρησις probat. Nulla creatura quantumvis nobilis, infinita simul distincte percipere seu comprehendere potest; quin imo qui vel unam partem materiae comprehenderet, idem comprehenderet totum Universum ob eandem περιχώρησιν quam dixi. Mea principia talia sunt, ut vix a se invicem divelli possint. Qui unum bene novit, omnia novit.

Quasdam objectiones Dno. Hartsoekero, rogatus olim misi. Eae partem illarum faciunt, quibus in suis declarationibus (Eclaircissemens) respondit, sed nomine meo non adjecto, quod nec desiderabam. At nuper in aliam controversiam implicati fuimus. Statuit ille, duas esse partes materiae, unam conflata ex Atomis perfecte duris, alteram ex fluido perfecto. Ego materiam ubique sua natura divisibilem statuo, nec Atomos nisi per miraculum induci posse, fluiditatem etiam transire in quosdam connexionis gradus per motus varios in materia inter se conspirantes. Inde fit ut separatio non fiat sine quadam motuum perturbatione, cui proinde resistitur. Hanc censeo ultimam rationem cohaesionis in materia. Nam unci, hami, funes, tabulae ab aëre vel aethere compressae, aliaque id genus firmitatem aliquam jam praesupponunt. Nec puto aliam rationem ultimam cohaesionis reddi posse, cum materia non nisi motibus variari possit. Occasionem mihi dederat Dn. Hartsoekerus, ut tale quid ei insinuarem. Videtur motum conspirantem a me adhibitum non satis intellexisse, unde nonnulla objicit, aliaque affert, quibus prolixius respondi quam constitueram. *Currente rota pro urceo amphora exiit.*

40. Leibniz to Des Bosses¹

[Hanover, 7 November 1710]

I received the *The Quesnel Case*, a splendid present from you, a little while ago, and I thought that I had made this known and thanked you. But if not, let me make sure that the thanks are adequate. I remember seeing your friend in Wolfenbüttel. Would that occasions often arose on which I could show my affection for you!

I am pleased that my response to your objection was satisfactory, especially as it was not wholly unforeseen. Anyone who admits preestablished harmony must also admit the doctrine of the actual division of matter into infinite parts. But the same thing follows from elsewhere, namely, from the nature of the motion of fluids, and from the fact that all bodies have a degree of fluidity.

If only the attribute of incomprehensibility were proper to God alone! Then, our hope of knowing nature would be greater. But it is all too true that there is no part of nature that could be known perfectly by us, and the very interconnection of things proves this. No creature, however elevated, can perceive distinctly or comprehend the infinite at the same time; but, on the contrary, whoever comprehends even one part of matter likewise comprehends the whole universe on account of the same interconnection I mentioned. My principles are such that they can hardly be separated one from another. Whoever knows one well, knows them all.

I sent some objections to Mr. Hartsoeker when I was asked some time ago.² They make up a part of those to which he responds in his *Clarifications*,³ but my name was not added because I did not want it to be. Not long ago, however, we were embroiled in another controversy. He states that there are two parts of matter, the one made up of perfectly hard atoms, the other of a perfect fluid. I assert that matter by its nature is everywhere divisible, that atoms can be introduced only through a miracle, and that fluidity passes through certain degrees of connection by means of various motions in matter that agree with each other. Hence it is brought about that separation does not arise without some perturbation of motions, which it therefore resists. This, I think, is the final reason for cohesion in matter, for barbs, hooks, cords, boards compressed by air or ether, and other things of this sort already presuppose some firmness. I do not think that another ultimate reason for cohesion can be given, since matter cannot be varied except by motion. Mr. Hartsoeker had given me the opportunity to convey some such remark to him. He seems not to have understood well enough the harmonizing motion employed by me, which is why he made several objections, and alleges other things, to which I have responded at greater length than I had intended. "With the wheel spinning, the amphora came out in place of the pitcher."⁴

Hanc epistolam quam ei scripsi ad Te mittere volui, etiam ut iudicium Tuum subeat. Inde si videbitur, Dno. Hartsoekero mittere poteris. Adjunctas etiam ad R. P. Orbanum destinari peto.

Tandem aliquando absolutum est in Batavis opusculum meum, et cum vos Batavis sitis viciniore, et in crebro cum iis commercio, facile per amicum inde habebis, schedula ad Bibliopolam Troyelium missa, quam hic adjungo. Interea vale et fave.

Dabam, Hanoverae 7 Novembr. 1710.

Des Bosses to Leibniz

Illustrissime vir, Patrone Colendissime

Binis litteris tuis 7^a et 18^a 9bris datis, tametsi amplum scribendi argumentum suppetebant, non respondendum duxi prius quam desiderati dudum Theodicaei exemplum vidissem. Allata sunt denique Amsteldamo, uti jusseras, exempla tria, pro quo munere sane luculento mihi que acceptissimo gratias Tibi quas possum ago maximas et nunc de occasione cogito qua Ptolemaei nostri votis satisfacere queam. Alterum exemplum Turnamino destino qui, cum absolutam operis hujus editionem paulo ante nunciasset, hanc interim, quam mitto Schedam ad te scripserat.

Litteras quas ad me direxeras, ad quos spectabant curavi statim et Orbanus jam respondit. Datas ad Hartsoeckerum legi magna cum voluptate, cumque priores Tuas objectiones responsaque ipse sua evulgare non dubitaverit, has si Turnamino communicarem neutrum moleste laturum putavi. Duo eas legenti in mentem venere mihi quae ex Te quaero. Primum: cum conspirantes dissonantesque motus, quos statuis vires in Entelechiis inaequales heterogeneasque arguere videantur, quo pacto explicandam putes hanc virtutum motivarum ἐτερογένειαν an haec in nuda earundem virium ad motum ciendum inaequalitate consistet? Alterum: cum virtutes agant nisi impediuntur, agantque magis ubi minus impediuntur, quid causae erit cur ea quae extimam universi superficiem constituunt corpora ita sibi mutuo adhaereant, ut nec vacuum intra mundi massam admittant, nec motu suo majus quam ante spatium expleant. Finge globum

I wanted to send you the letter that I wrote to him, so that it might be submitted to your judgment as well. Then, if it seems good, you can send it to Mr. Hartsoeker. I ask also that the enclosed be sent to the Reverend Father Orban.

Since you are a neighbor of the Dutch and in frequent contact with them, once my little book is finally completed in Holland, you will be able to obtain it through a friend easily, when you send the Troyel bookstore the note that I am here attaching.⁵ In the meantime, farewell and think kindly of me.

From Hanover, 7 November 1710.

41. Des Bosses to Leibniz¹

[Cologne, 6 January 1711]

Most Distinguished Sir, Most Esteemed Patron,

Though your two letters of 7 and 18 November gave ample reason to write, I was not given to respond to them until I had seen a copy of the *Theodicy*, which I have desired for some time. Three copies were finally brought from Amsterdam, as you ordered, and I thank you from the bottom of my heart for this truly splendid and most precious gift. Now I think I shall be able to make good on my promises to our Tolomei. I am saving the other copy for Tournemine, who, when I informed him of the completed publication of the work a little while ago, in the meantime had written the page that I am forwarding to you.

I took care at once that the letters you sent me were forwarded to their intended recipients,² and Orban has already responded. I read the letter written to Hartsoeker with much pleasure; and since he did not hesitate to publish your first objections and his responses, I thought that neither of you would be annoyed if I passed the letter on to Tournemine. Two things come to mind in reading this letter, which I put to you. First, since the harmonious and disharmonious motions that you establish seem to show that there are unequal and heterogeneous forces in the entelechies, how do you think this heterogeneity of motive powers is to be explained, or does it consist in the mere inequality of these same forces in inciting motion? Second, since the forces act except when they are impeded and act more when they are impeded less, what will be the causes that explain why those bodies that constitute the outermost boundary of the universe adhere to each other in such a way that they neither allow a vacuum within the mass of the world nor fill space with their own motion more than before? Imag-

cujus extimae partes nullum reperiant motus impedimentum, utique omnes extimae illae partes cum resistentiam invenient ex ea parte qua cum exteris conjunguntur partibus linea recta vel per tangentem vel potius per radium a centro se remove incipient. Quod sine vacui intromissione vel corporum ut vocant inflatione fieri posse non videtur. Nescio an mentem meam satis clare explicem sed haec hactenus.

Redeo ad Theodicaeum Tuum quem dum obiter pervolvo tantisper dum meditatus eum perlegendi otium fuerit, video *Litteras philosophicas* Tri-vultii editas anno 1703 a Te desiderari atqui Forsterus a quo emi ipse ante triennium venales habebat. Eccam tibi ruditer ab adolescente descriptam quam laudat Baylius. Quod si et caeteras quarum titulos adscripsi videre velis faxo ut et illae describantur et librum ipsum mitterem si per tabellarium commode posset. Tu si quid novum in hac, dignum animadversione repereris mihi quaeso imperti, quanquam ex iis quae pag. 592 et praecedentibus mones, satis apparet immerito ista pro demonstrationibus venditare Lamium.

Alia paucula a me nunc quidem notata subjicio. Num P. Fridericus Spee noster origine Westphalus fuerit dubito. In Bibliotheca certe scriptorum Societatis nostrae quae a Nathanaele Sothuello prodiit auctior, Caesaris insulanus patria fuisse perhibetur ex nobili Langekfeldiorum (Langefeldiorum fortasse legendum) familia. Caeterum cum autor hic merito a Te laudatus caritate perfecta etiam sine sacramento hominem justificari docet, habet conspirantes secum theologos nostros omnes utpote qui sequentium Baji propositionum damnationi unanimes subscribunt: 70. *Homo existens in peccato mortali sive in reatu damnationis aeternae potest habere veram caritatem, et caritas etiam perfecta potest consistere cum reatu aeternae damnationis.* 71. *Per contritionem, etiam cum caritate perfecta et cum voto suscipiendi sacramentum conjunctum non remittitur crimen extra casum necessitatis aut martyrii sine actuali susceptione sacramenti.* Itaque qui *contritionem* ad justificationem in sacramento consequendam requirunt ab adversariis in hoc solum discrepant: quid hic sub nomine Caritatis perfectae veniat intelligendum, dum hi ad perfectam caritatem sufficere volunt actum qui intuitu divinae bonitatis super omnia amabilis eliciatur; illi contra ad caritatis, de qua hic sermo est, perfectionem, certam quandam in actu intensionem aut aliquid hujusmodi requirunt ex quo patet

ine a globe whose outermost parts find no impediment to motion. Certainly all those outermost parts will begin to move away either in a straight line or along a tangent or else along a radius from the center when they encounter resistance from the part by which they are joined to external parts. It does not seem that this could happen without the introduction of a vacuum or a so-called inflation of bodies. I do not know if I am explaining myself sufficiently clearly, but enough of this.

I come back to your *Theodicy*, which I am now just skimming over until I have the leisure to read through it more carefully. I see that you would like the *Philosophical Letters* published in Trévoux in 1703, and yet Förster, from whom I purchased the book, had it for sale three years ago.³ Look for yourself at what Bayle praises in the rough transcription that a youth has made for you. And if you also wish to see the rest, whose titles I have listed, I shall have them transcribed, and I would send the book itself if it could conveniently be done by courier. If you find anything new here that is worthy of consideration, I ask that you let me know, although from the things you point out on page 592 and the preceding pages, it seems rather unwarranted to commend them as Lamy's demonstrations.⁴

I add here some other minor points from my notes. I doubt that our Father Friedrich Spee originally came from Westphalia. Certainly in the bibliography⁵ of the writers of our society, which was expanded upon by Nathaniel Southwell, he is said to have been a native of the Channel Islands from the noble family of the Langekfelds (perhaps of the legendary Langefelds).⁶ In any case, when the author whom you rightly praise here teaches that man is justified by perfect love even without the sacrament, he has all our theologians as his allies, namely, those who unanimously subscribe to the condemnation of the following propositions of Baius⁷: "70. A man who lives in mortal sin or is sentenced to eternal damnation can have true charity, and the charity can be perfect even when he is sentenced to eternal damnation. 71. Even with perfect charity and with the wish of receiving the associated sacrament, the verdict is not overturned by contrition, except in the case of necessity or martyrdom, without the actual granting of the sacrament." And so those who require "contrition" in order to obtain justification in the sacrament differ from their opponents solely in what comes to be understood by the term "perfect charity": the latter want the act, which may be elicited by an intuition of divine goodness more lovable than all things, to suffice for perfect charity; the former, on the other hand, on the issue of the perfection of charity, about which we are speaking, require a certain actual intention or something of this sort. From

argumentum quod olim Pelissonio obmovebas, et cujus nunc iterum meministi, ex aliquorum Theologorum nostrorum sententia de solius caritatis ad justificationem sufficientia petita ab aliis quoque qui contrarium sentiunt, esse diluendum. Nec vero ex hoc principio sequi arbitramur eos qui extra Ecclesiae communionem degunt salutem consequi posse, negamus enim omnes, eos ad caritatem perfectam quamdiu ab Ecclesia segregati sunt, posse pertingere. Nempe caritatem perfectam necesse est praecedat fides, eaque non late dicta aut implicita, qualem ex testimonio creaturarum haustam habere potuerant philosophi, sed stricte sumpta et explicita (saltem aliquorum articulorum) quae Dei revelantis verbo nititur unice. Hac porro fide caret qui orthodoxae Ecclesiae repugnat auctoritati, quam ita perspicuam esse contendimus ut nemo, saltem eruditus, si, ut debet implorato lumine divino notas ejus accurate perpenderit, eam sine culpa pertinaciae ignorare queat. Jam vero hac cum culpa stare nequit ullius articuli fides Theologica quia per cujuslibet articuli fidem, ita comparatur credentis animus, ut si alii articuli quicumque a Deo revelati sibi innotescerent ac credendi proponerentur, ab iis assensum cohibere, vel saltem dissentire stante quam habebat fide non posset, et haec quidem ex parte fidei quae caritatis fundamentum est. In ipsa caritatis natura secundum se considerata difficultas occurrit similis. Nam caritas ea, quam justificatio requirit, virtuale votum sive propositum includit adimplendi ea omnia quae divinae amicitiae leges exigunt. Exigunt autem ut orthodoxa cum Ecclesia communicemus, quam sine culpa, quae caritati repugnat, ignorare non possumus. Certe Speus ipse ad caritatem justificantem virtuale saltem propositum peccata sua clavibus Ecclesiae subjiciendi diserte postulat. Itaque sicubi caritatem dixit sine sacramento sufficere, talem intellexit vi cujus animus ad adhibendum suo tempore sacramentum comparatus esset. Atque hanc ejus esse mentem demonstrant cum alia ejusdem manuscripta, quae hic reperi, anecdotata, tum imprimis scriptae ad tres praenobiles sorores epistolae duae, quarum scopus est ostendere quod salus extra veram Ecclesiam nulla sit. Harum epistolarum in quibus auctoris ingenium et caritas mirifice elucet, si cupis, exempla mittam alias. Quod si fortassis aliorum hac de re gravissimi sane momenti sententiam audire non pigeat, Turnaminum Ptolemaeumque libens consulam, et quid responderint edocebo.

this it is clear that the argument, drawn from the view of some of our theologians concerning the sufficiency of charity alone for the desired justification, which you once offered to Pellisson and which you now have recalled again, must also be rejected by others who hold the opposite view.⁸ Nor indeed do we think that it follows from this principle that those who live outside the communion of the Church can attain salvation, for we deny that any of them can achieve perfect charity as long as they are separated from the Church. Certainly, it is necessary that faith precede perfect charity; and this, which depends entirely on the revelatory word of God, is not said loosely or figuratively, such as philosophers could have held, drawn from the testimony of created things, but is taken strictly and literally (at least of some articles). It follows further that anyone who opposes the authority of the orthodox Church lacks faith. We contend that this is so clear that no one who is the least bit learned can ignore this without being guilty of obstinacy, if after having appealed for divine light he has considered its signs accurately as he should. Now, in fact, theological faith in any article cannot coexist with this guilt, since through faith in any article whatsoever the soul of the believer is so prepared that, if any other articles revealed to it by God should become known and proposed for believing, the soul could not hold back assent from them, or at least it could not dissent from them while persisting in the faith that it had; and this indeed is part of faith, which is the foundation of charity. In the very nature of charity considered in itself a similar difficulty occurs, for the charity that justification requires includes a virtual vow or intention to carry out all those things that the divine laws of friendship require. But they demand that we participate in the orthodox Church, which we cannot disregard without guilt, which is incompatible with charity. Certainly, for a charity that justifies, Spee himself clearly requires at least a virtual intention to submit one's sins to the keys of the Church. And so if he said anywhere that charity suffices without the sacrament, he understood this to mean that the soul had been furnished with a power for employing the sacrament at its own time. And that this is his opinion is shown by other manuscripts of his that I have found here, by anecdotes, and especially by two letters written to three celebrated sisters, whose goal it is to show that there is no salvation outside the true Church. If you wish, on another occasion I shall send copies of these letters in which the author's intelligence and charity shine forth so wonderfully. And if by chance you may not be disturbed to hear the opinion of others on this matter, which is clearly of utmost importance, I shall gladly consult with Tournemine and Tolomei and apprise you of what they say.

Quod scientiam conditionatam quam mediam vocamus ad simplicis intelligentiae scientiam revocas, non repugnamus. Audi Franciscum Suarium in Prolegomenis secundi Tomi de gratia cap. 6. n. 7. *Divisio Scientiae divinae in scientiam simplicis intelligentiae et scientiam visionis est adaequata, et scientia conditionata simpliciter loquendo sub scientia simplicis intelligentiae continetur . . . quia licet per illam videatur effectus contingens non tantum ut contingens, sed etiam ut determinatum ad alteram partem ex hypothesi, tamen quia illa hypothesis nondum supponitur futura ex aliquo decreto Dei, totum id manet subesse possibili, et ideo tota illa cognitio ad simplicem intelligentiam pertinet.* Hucusque Suarez. Satis itaque habemus quod juxta te scientia illa conditionata decretum nullum divinum praerequirat subjective absolutum et objective conditionatum quale Thomistae statuunt, in quo maxima nobis cum illis controversia sita est. Praedeterminationem moralem quam ponis cum libertate posse consistere certum habeo, nec aliquem ex nostris facile reperies qui neget. Plurimos reperies qui id ex professo asserant. Fatemur insuper quotquot sumus, e Societate saltem, voluntatem nisi aliqua causa motam agere non posse. Alioquin extra objecti sui sphaeram quae bonum ut sic est, ageret. An vero semper et ubique praedeterminationem admittere necesse sit necdum statuere possum. An dices Adamo innocenti moralem peccandi necessitatem fuisse impositam quae imposita sane fuit si praedeterminatus hoc pacto fuit Adamus, et ratio praevalens praedeterminat. Atqui si Augustinum audimus, peccandi necessitas non nisi a malo est, bonum certe Deum autorem habere non posse videtur.

Praeterea, dum potentiam sui determinativam esse chymaericam contendis, visne potentiam hujusmodi implicare contradictionem? Non opinor. Alioqui metaphysicam necessitatem omnium effectorum induceres. At moralis necessitas potentiam se determinandi non destruit. Quis enim determinaret voluntatem nisi ipsa sese si, quod fieri potest, rationi praevalenti non cederet? Quod Tu hic respondebis respondere poterit et Molina cui objicis *fieri non posse ut determinatio resultet ubi nulla determinationis radix*. On leur demandoit . . . comment il etoit possible qu'il y resultât enfin une determination dont il n'y a aucune source. Car de dire que c'est le privilege de la cause libre . . . c'est luy donner le privilege d'être chimerique. Atque haec in praesenti sufficiant plura alias ubi totum opus meditare expendero. De quo universim judico non frustra commotam esse Gallorum Italarumque expectationem. Caeterum praeclara quae in eo

We do not oppose your reduction of conditioned knowledge, which we call middle knowledge, to knowledge of simple intelligence. Listen to Francisco Suárez in the second preface to the book *On Grace*, chapter 6, section 7: "The division of divine knowledge into knowledge of simple intelligence and knowledge of vision is adequate; and, simply put, conditioned knowledge is contained in knowledge of simple intelligence . . . because, although by this a contingent effect may be seen not only as contingent but also as determined by another part *ex hypothesi*, still, because this future hypothesis is not yet supported by some decree of God, all of this remains in the realm of the possible, and for this reason the entire cognition pertains to simple intelligence."⁹ Thus Suarez. And it is enough for us that, according to you, this conditioned knowledge presupposes no divine decree that is subjectively absolute and objectively conditioned, as the Thomists claim, in which the greatest part of our controversy with them is located. I am certain that the moral predetermination that you posit can be consistent with freedom, nor will you easily find one from among us who denies this; you will find many who assert it openly. We confess, moreover, as many as we are of the Society of Jesus at least, that the will cannot act unless moved by some cause; otherwise it would act outside the sphere of its object, which is the good as such. I cannot yet decide whether it is really necessary always and everywhere to admit predetermination. Or will you say that the moral necessity of sinning was implanted in an innocent Adam, which it clearly was if Adam was predetermined in this way and a prevailing reason predetermines? But if we listen to Augustine, the necessity of sinning comes only from evil, and it seems that it cannot have God, who is assuredly good, as its author.

Further, when you contend that a power of determining oneself is a chimera, do you mean that this kind of power implies a contradiction? I do not think so. Otherwise, you introduce the metaphysical necessity of all effects. But moral necessity does not destroy the power of determining oneself. For what would determine the will except itself, if, as could happen, it did not submit to a prevailing reason? Whatever you will respond here, Molina, to whom you object, also will be able to respond: "it cannot be the case that a determination results where there is no source of the determination." "One wonders . . . how it was possible that there finally resulted a determination here of which there is no source. For to say that it is the privilege of a free cause . . . is to give it the privilege of being chimerical."¹⁰ These things are enough for the present; there will be more at another time when I have carefully considered the entire work. On the whole I conclude that the expectations of the French and Italians about it were

ubique emicant cogitata non recensebo, nec pulcherrimo Systemati Tuo deprædicando immorabor, contentus ea subinde proferre a te si videbitur elucidanda quæ negotium mihi facessunt.

Fasciculus nihil aliud, quam quod accepisti, continebat. In horas expecto missos a Ptolemaeo libellos de re Sinica. Sed et Turnaminus Gallicos suppeditabit. Vale Vir illustrissime, et novum quem auspicati sumus annum quam felicissime age. Dabam Coloniae Agrippinae 6^a Anni 1711.

Illustrissimæ Dominationi Tuæ,

Devotissimus cliens

Bartholomæus Des Bosses S.J.

P.S. En Tibi opportune litteras Hartsoeckeri quas accepi dum postremam hanc pagellam scribebam.

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Gratias ago maximas, quod curasti literas meas, quod Epistolam sextam Lamii apud Trivultienses editam mecum communicas, quod egregiis viris Ptolemaeo et Turnamino Tentamina mea destinās, quod Turnamini et Hartsoeckeri literas mittis. Utrique respondeo et ut responsionem cures rogo. Neque ingratum est, quod controversiæ cum Hartsoekero meae participem Turnaminum facis. Ecce jam quid replicem: nam responsionem Hartsoeckeri quam misisti, Tibi lectam puto; sin minus, aut si ipse non mittit, communicabo.

Nunc ad Tuas quaestiones venio. Et primum cum Entelechiæ repræsentent materiæ organicæ constitutionem, tantam in ipsis varietatem necesse est esse, quantam in ipsa materia percipimus, nec una Entelechia alteri perfecte similis esse potest: et Entelechia agit in materia secundum ipsius exigentiam, ita ut status materiæ novus, sit consequens status prioris, secundum leges naturæ; leges autem naturæ per Entelechias effectum suum consequuntur. Sed et ipsius Entelechiæ status præsens consequitur ex statu ejus priore. De extima materiæ superficie quod dicam non habeo; nisi vel negandum ullam talem esse superficiem, vel ad miraculum confugiendum, quo massa intra certos limites coerceatur.

Cum Dusseldorpii ni fallor sint aliqui ex familia de Spee, hinc facile sciri poterit, an non R. P. Fridericus Spee ex eadem familia fuerit, et unde fuerit ortus.

not aroused in vain. For the rest I shall not recount the excellent thoughts that are prominent everywhere in it, nor shall I linger in criticizing your beautiful system, being content now and then to mention things that cause me trouble, if it seems they should be clarified by you.

The packet contained nothing more than what you received. Hourly I expect the pamphlets sent by Tolomei on the Chinese affair. And Tournemine will supply those in French as well. Farewell, most distinguished Sir, and may this new year that we have begun be as happy as possible for you. From Cologne, 6 January 1711.

Your Excellency's most devoted servant,

Bartholomew Des Bosses, S.J.

P.S. Behold Hartsoeker's timely letter to you, which I received while I was writing this last page.¹¹

42. Leibniz to Des Bosses¹

[Hanover, 8 February 1711]

Most Reverend Father, Most Honored Supporter,

Thank you very much for taking care of my letters,² for communicating to me the sixth of Lamy's letters published at Trévoux, for directing my *Essays*³ to the eminent men Tolomei and Tournemine, and for conveying the letters of Tournemine and Hartsoeker. I am responding to both and ask that you take care of the replies.⁴ I also am not ungrateful to you for making Tournemine a participant in my dispute with Hartsoeker. Take a look at what I say now, for I believe you have read Hartsoeker's response, which you sent; if not, or if he himself did not send it, I shall communicate it to you.

I now come to your questions. First, since entelechies represent the constitution of organic matter, it is necessary that there be as much variety in them as we perceive in matter itself; nor can one entelechy be perfectly similar to another. And an entelechy acts in matter according to its own exigency,⁵ so that a new state of matter is a consequence of a prior state, according to the laws of nature; however, the laws of nature achieve their effect through entelechies. But, in addition, the present state of the entelechy itself follows from its prior state. I do not have anything to say about the outermost surface of matter except that either we must deny that there is any such surface or we must resort to a miracle by which the mass is confined within certain limits.

Since there are, if I am not mistaken, some of the Spee family in Düsseldorf, it could easily be learned whether or not the Reverend Father Friedrich Spee was of the same family and where he was born.⁶

Pergrata sunt quae de rejectis quibusdam Baji propositionibus memoras, quas ego etiam rejecero. Nec P. Spejū allegavi, quasi nova inter vos docentem, sed tanquam vestra pulchre explicantem. Caeterum utrum aliquis extra vestram Ecclesiam caritatem veram habere possit, facti est quaestio, quod possibile praesumitur, donec contrarium probetur. Quae Speji inedita aut mihi non visa sperare jubes, semper gratissima erunt.

Moralem in Adamo aut alio quocunque peccandi necessitatem fuisse, ego quoque non dixerim, sed hoc tantum: praevaluisse in eo inclinationem ad peccandum, et adeo praedeterminationem aliquam fuisse, etsi non necessitantem. Illud agnosco in Deo optime agendi in confirmatis spiritibus bene agendi moralem esse necessitatem. Et in universum vocabula ita interpretari malim ne quid consequatur quod male sonet. Itaque praestat nunquam moralem agnoscere necessitatem nisi ad bonum, quia quae mala sunt sapientem nec facere posse credendum est. Nescio an aliter aliquando locutus sum; si feci, incauta fuerit locutio, et emendanda, etsi non in rebus sed in phrasibus fuerit lapsus.

Omnino statuo potentiam se determinandi sine ulla causa, seu sine ulla radice determinationis, implicare contradictionem; uti implicat relatio sine fundamento; neque hinc sequitur metaphysica omnium effectuum necessitas. Sufficit enim causam vel rationem non esse necessitantem metaphysice, etsi metaphysice necessarium sit, ut aliqua sit talis causa.

Non bene intelligo subtilitatem processus observati Romae, dum video R^{mum}. P. Ptolemaeum contentum esse decisione Pontificia, et tamen Pontificem Maximum, aliquid novi definiisse velle videri. Itaque gratum erit, si lucem aliquam mihi accendas qua utar prout jubebis. Quod superest vale et fave. Dabam Hanoverae 8. Febr. 1711.

Deditissimus

Godefridus Guilielmus Leibniz

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Cum Te saluum et incolumem Hannoveram rediisse et fasciculum libellorum Italicorum a Ptolemaeo missorum accepisse jam confidam mitto

I am very grateful for the things you relate concerning some of the rejected propositions of Baius, which I also reject. I did not cite Father Spee as a teacher of novelties among you, but rather as someone who explains your teachings beautifully. Besides, whether anyone outside your church can have true charity is a question of fact, which is presumed to be possible until the contrary is proved. You tell me to expect things by Spee that are unpublished or that I have not seen—such things will always be most welcome.

I, too, would not say that there was a moral necessity to sin in Adam or in anyone else, but only this: there prevailed in him an inclination to sin, and therefore there was some predetermination, though not one that was necessitating. I acknowledge that this is a moral necessity in God of acting for the best, and in confirmed spirits of acting well. And in general I should prefer that words be so interpreted that what sounds bad does not follow.⁷ And so it is preferable never to acknowledge a moral necessity except toward the good, because we should believe that a wise person cannot do things that are evil. I do not know if I spoke differently on some other occasion; if I did, the wording was incautious and ought to be corrected, though the lapse was in the phrasing, not in the meaning.

To be sure, I maintain that a power of determining oneself without any cause, or without any source of determination, implies a contradiction, as does a relation without a foundation; but the metaphysical necessity of every effect does not follow from this. For it is enough that the cause or reason is not metaphysically necessitating, even though it is metaphysically necessary that there be some such cause.

I do not understand well the subtlety of the process observed in Rome, when I see that the Most Reverend Father Tolomei is content with the papal decision and yet the supreme pontiff seems to have wanted to establish something new. And so I shall be grateful if you shed some light on this that I may use as you see fit. For the rest, farewell and think kindly of me. From Hanover, 8 February 1711.

Most faithfully,
Gottfried Wilhelm Leibniz

43. Des Bosses to Leibniz¹

[Cologne, 25 April 1711]

Most Distinguished Sir, Most Esteemed Patron,

Since I trust that you have by now returned to Hanover safe and sound and have received the package of Italian books sent by Tolomei, I am fi-

nunc tandem litteras Clarissimi Hartsoekeri quas cum Parisiensibus nostris communicare ipse mihi concessit exemplo Tuo. Tres Patris Spei litteras descriptas pridem ad Hildesienses nostros direxi, quas Tibi si necdum redditae sunt, cum his reddendas arbitror. Tuas ad Turnaminum una cum scriptarum ad Hartsoekerum apographo Parisios curavi. Theodicaeum Tuum avide expectatum et Ptolemaeus et Turnaminus jam acceperint. Nova Chinica novissima in adjecta scheda reperies. Patrem Castner qui ea scripsit, dum Roma ad Chinas reverteretur, Monasterio Westphaliae transeuntem videre memini. Addidi et quaedam Romana causam Chinicam spectantia, praeter quae nihil adhuc intelleximus.

Ob commendatum Serenissimo Duci Dominum Nicolaum Reingens gratias ago quas debeo, cum in aula Regis Catholici complures habeat merito suo patronos nec aliunde rationes desint sat graves, quarum specimen adjectae litterae exhibent. Opinor rem successu non carituram maxime si Serenissimi Ducis suffragium accesserit, de quo tamen molestus esse nolim.

Venio nunc ad argumentum penultimaepistolaeTuae. Loca in quibus moralem in Adamo aliisque peccantibus necessitatem peccandi innuere videbaris, haec fere sunt.

Pag. 628. 3^a objectione. 1. Prosyllogisme. Tout predeterminé est nécessaire, tout evenement est predeterminé, donc tout evenement et par consequent le peche (d'Adam) aussi est nécessaire . . . on repond si quelqu'un entendoit une . . . necessite . . . qui ne fut que morale . . . il est manifeste qu'on luy nieroit la majeur.

Pag. 468 n. 282. L'on peut dire dans un certain sens qu'il est nécessaire . . . que les diables et les damnez pechent . . . que l'homme suive le parti qui apres tout le frappe le plus, mais cette necessité n'est point opposée à la contingence etc.

Pag. 497. necessite (determine plutot à moins qu'on ne parle d'une necessité morale[]).

Quod vero nec admitti debere videatur praedeterminatio moralis ad malum directae saltem a Deo proveniens (qualis esse videretur ea quae Adamum initio peccare fecit[]) inde probari videtur quod Deus ab initio fecerit hominem rectum, sed qui habet majorem inclinationem ad malum quam bonum non est rectus ergo. Idem dici potest de angelis peccantibus.

Fateor potentiam se determinandi sine ulla causa sive sine ulla radice

nally sending the letter from the esteemed Hartsoeker, a letter that he himself allowed me to communicate with our brethren in Paris following your example.² I sent to our brethren in Hildesheim Father Spee's three letters described a while ago. I believe that if they have not yet been sent to you, they are to be sent with this letter.³ I took care of your letter to Tournemine, along with a copy of your writings against Hartsoeker for our brethren in Paris. Both Tolomei and Tournemine will by now have received your eagerly awaited *Theodicy*. You will find the latest news about China on the enclosed page. I remember seeing Father Castner,⁴ who wrote this while returning to China from Rome, when he was spending some time at a monastery in Westphalia. I have also added some things dealing with Rome's view of the Chinese affair; we have not learned anything besides this yet.

I owe you thanks for recommending Reverend Nicholas Reingens to the most serene duke,⁵ since, by virtue of his merit, he has many supporters at the court of the Catholic regent, not that there are not enough other weighty reasons, an example of which the enclosed letter shows. I believe that the matter will not fail, especially if the opinion of the most serene duke is added. But I do not want to be troublesome about this.

I come now to the argument of your penultimate letter. The following passages are the ones in which you seemed to suggest that there was in Adam and other sinners a moral necessity to sin:

Page 628, objection 3, prosyllogism 1: Every predetermined thing is necessary, every event is predetermined, therefore every event and consequently the sin (of Adam) also is necessary. . . . It is responded that if someone understood a . . . necessity . . . that is only moral . . . it is clear that he would deny the major premise.⁶

Page 468, section 282: One can say in a certain sense that it is necessary . . . that demons and the damned sin . . . that man follows the course that in the end attracts him the most, but this necessity is not opposed to contingency, etc.⁷

Page 497: necessitates (determines rather, unless one speaks of a moral necessity).⁸

But, in fact, it seems that a moral predetermination to evil, at least one arising directly from God (as that which made Adam sin in the beginning would seem to be), ought not to be admitted. From this it seems to be proved that God made man upright from the beginning; but he who has a greater inclination to evil than to good is for that reason not upright. The same thing can be said about sinning angels.

I confess that the power of determining oneself without any cause or

determinationis implicare contradictionem neque enim voluntas eligere sive determinare sese potest absque motivo, quod semper est bonum ali-quod ipsi propositum. Sed nego voluntatem si bonum minus efficaciter propositum prosequeretur determinaturam se sine ulla causa, et aio bonum etiam minus efficaciter propositum sufficientem esse causam, meta-physice saltem loquendo, ad hoc ut illud amplectantur illud ipsum minus bonum. Alioquin sequeretur Adamum sine contradictione non potuisse obedire Deo dum peccavit quod sic probō: determinare se sine causa im-plicat contradictionem sed Adamus obediens Deo determinasset se sine causa, nam, ut suppono, proponebatur ipsi motivum peccandi fortius quam motivum obediendi. Motivum autem minus efficaciter propositum amplecti est se sine causa determinare.

Vasquius noster qui Tecum sentit voluntatem non posse eligere aliquid prae alio nisi intellectus proponat efficacius etc., ait voluntatem posse sus-pendere electionem objecti efficacius propositi, et tum intellectum hoc ipso determinari ad considerata motiva pro parte ineffacius proposita, ex qua meliori consideratione sequitur tandem ut intellectus proponat effi-cacius motiva contraria, adeoque ut voluntas possit eligere oppositum. Sed hoc responsum, quantum video, principia a Te posita non admittunt.

Pag. 66 sic ais: *nous nous devons contenter de dire que l'incarnation est l'union la plus étroite qui puisse exister entre le createur et la creature sans qu'il soit besoing d'aller plus long.* Les Nestoriens ne pouroient ils point etre contens de cette explication? Ouy sans doute il en devoient etre contens, car ils nioient que l'union plus que morale entre le createur et la creature pust exister. Il semble donc qu'il soit besoing de dire quelque chose de plus.

Dum opus S. Thomae Aquinatis contra Gentiles pervolvo incidi forte in caput 93 libri 4^{ti} in quo, nisi fallor eam ipsam rationem perpetuitatis poe-narum quas damnati tolerant, quam adducis, et ex Drexelio confirmas in-sinuat. Ait enim *poenam animarum quae damnantur non fore perpetuam si voluntatem in melius mutare possent quia iniquum esset quod ex quo bonam voluntatem haberent, perpetuo punirentur.* Paulo infra dicit: *volun-tatem a peccato mutari in bonum non contingit nisi per gratiam Dei. Damnatorum autem animae a gratia totaliter excluduntur.*

Atque haec sunt quae in praesenti occurrunt. Fortasse plura a Patre Tur-

without any source of determination implies a contradiction, for the will's choosing or determining itself cannot be without a motive, because there is always some good represented to it. But I deny that the will, if it pursued a good represented less forcefully, would determine itself without any cause, and I say that even a good represented less forcefully is a sufficient cause, at least metaphysically speaking, for this reason: that the less good thing itself is embraced. Otherwise, it would follow that Adam could not have obeyed God without a contradiction when he sinned. I prove this as follows: to determine oneself without a cause implies a contradiction, but Adam, in obeying God, would have determined himself without a cause, for, as I suppose, a motive for sinning was represented to him that was stronger than the motive for obeying. But to embrace a motive represented less forcefully is to determine oneself without a cause.

Our Vasquez,⁹ who agrees with you that the will cannot choose one thing over another unless the intellect represents it more forcefully, etc., says that the will can suspend the choice of an object that is represented more forcefully, and then the intellect is determined by this very fact to consider motives that are for their part represented less forcefully. On closer consideration, it follows ultimately from this that the intellect represents contrary motives more forcefully and thus that the will can choose the opposite. But, as far as I can see, the principles assumed by you do not allow this response.

On page 66 you say: "We ought to content ourselves with saying that the incarnation is the closest union that can exist between the creator and the created without its being necessary to go further."¹⁰ Couldn't the Nestorians be content with this explication? Yes, doubtless, they would be content with it, for they deny that there can exist a union between the creator and the created that is more than moral. It therefore seems that it is necessary to say something more.¹¹

While reading through St. Thomas's work *Summa contra Gentiles*, I found by chance in book 4, chapter 93, that, unless I am mistaken, he introduces the very reason that you adduce, and support by appeal to Drexel,¹² for the perpetuity of the punishments that the damned endure. For he says: "the punishment of the souls who are damned will not be perpetual if they can change the will into something better, since it would be unjust that they should be punished forever after they had a good will." With Paul he says later: "it does not happen that the will is transformed from sinful to good except through the grace of God, but the souls of the damned are completely excluded from grace."

These are the things that occur to me at the moment. Perhaps I shall re-

namino accipiam qui ut mihi antequam Tuas acciperet scripsit si epistolam ad Patrem Bouvet ad ipsum miseris faciet ut responsum habeat. Quid ad Tuas responsurus sit expecto proxime. Vale illustrissime Domine et si quid in his partibus tua causa possim opellam meam noli spernere. Dabam Coloniae Agrippinae 25 Aprilis 1711.

Illustrissimae Dominationi tuae

Devotissimus cliens

Barthol. Des Bosses SJ

Leibniz to Des Bosses

Plurimum Reverende Pater Fautor Honoratissime

Post longam absentiam domum simul et ad commercium nostrum literarium redeo. Non tamen Tuum Dn. Reingens commendare Smi Ducis favore interposito omisi. Nam Domino Baroni de Imhof Barcinonem jussu ejusdem Smi Ducis eunti res commendata est. Scripsit ille vero mihi Vienna 29 Junii his verbis: *Je m'employeray volontiers pour le P. Reyngens, mais il faudra que cet honnête homme dresse un memoire pour obtenir ce qu'il desire. Car la lettre de son ami ne suffira pas pour cela.* Ego non dubito quin libelli supplices pro ipso missi sint Barcinonem. Et, si res integra est, amicus ejus aut procurator Barcinone agens, utiliter ad Dn. Baronem de Imhof recurret, ubi is Barcinonem appulerit.

Gratias ago pro Epistola Germanica Patris Spee, egregia sane, sed interdum plus affectus (etsi laudabilis) quam rationis spirante.

Cum visus sum attribuisse necessitatem moralem eventibus, mallem explicuisse mentem distinctius. Electio totius seriei contingentium tanquam convenientissimae habet necessitatem moralem; sed hoc non aeque commode enuntiatur de peccatis eam ingredientibus, et per concomitantiam admissis.

Adamus non habuit initio majorem inclinationem ad malum, quam ad bonum, cum creabatur, sed tunc cum peccatum instabat.

Cum quis eligit hoc modo, non implicaret contradictionem si elegisset alio modo, quia rationes determinantes non necessitant.

Vasquii sententia quam in Tua Epistola exhibes, videtur conciliabilis cum mea.

ceive more news from Father Tournemine, who, as he wrote to me before he received your letter asking if you had sent him the letter to Father Bouvet, will be sure to have a reply. I am expecting his response to your letter soon. Farewell, most distinguished Sir, and if there is anything in these parts that I may do for you, please do not spurn my meager efforts. From Cologne, 25 April 1711.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, S.J.

44. Leibniz to Des Bosses¹

[Hanover, 8 July 1711]

Most Reverend Father, Most Honored Supporter,

After a long absence, I have returned home and at the same time return to our correspondence.² I have by no means stopped recommending your Reverend Reingens to the most serene duke after having put in a good word for him, for the matter was recommended to Baron von Imhof,³ who has been ordered to Barcelona by the same serene duke. In fact, he wrote the following to me from Vienna on 29 June: "I shall willingly occupy myself on behalf of Father Reingens. But it will be necessary for this gentleman to write a brief to obtain what he wants. For the letter of his friend will not suffice for this." I do not doubt that the pamphlets petitioning on his behalf were sent to Barcelona. And if the case is complete, it will be useful for his friend or deputy acting in Barcelona to make contact again with Baron von Imhof when he arrives in Barcelona.

Thank you for Father Spee's German letter, which is clearly extraordinary, but at the same time is filled more with emotion (even if praiseworthy) than with reason.⁴

I wish I had explained my view more distinctly when I seemed to attribute moral necessity to events. The choice of an entire series of contingent things as the most fitting has moral necessity, but this is not said as readily of the sins that are ingredients in this series and that are admitted by their concomitance.

Adam did not have a greater inclination to evil than to good from the beginning, that is, when he was created, but at the time when he pursued sin.

When someone chooses in one way, it would not imply a contradiction if he had chosen in another way, because determining reasons do not necessitate.

The view of Vasquez, which you present in your letter, seems to agree with my own.

Cum sufficere dico Unionem artissimam inter Deum et Creaturam, plus quam moralem intelligo. Et intelligent, qui me legent; alioqui in verbis luderem, qui non est mos meus.

Maximas ago gratias pro Sinicis vestrorum scriptis. Pontificis Maximi nunc est diserte dicere, velitne et jubeat Sinenses Christianos a receptis honoribus abstinere qui Confutio et majoribus exhibentur. Id si diserte pronuntiat Missio (ni fallor) illic extincta erit.

Adm. Reverendo Patri Bouveto scripsi aliquoties frustra; rogavi qualesnam essent libri, quos (ipsius ut arbitror munere) recepi. Nam literae ejus, libris sociae, perierant.

Ecce quae ad novissimas Domini Hartsoekeri repono. Optarem ut TE medium interponeres arbitrumque inter nos ageres. Vale. Dabam Hanoverae 8 Julii 1711.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. R^{mo} Patri Ptolemaeo et gratias pro libris missis a me referri et cultum meum perpetuum denuntiari peto.

Des Bosses to Leibniz

Illustrissime Vir, Patrone Colendissime

P[ax] C[hristi]

Jam dudum reditum Tuum avide praestolabar: nunc ex litteris Tuis 8 Julii scriptis sed primum nudiustertius mihi traditis salvum Te Hannoveram advenisse demum intelligo et serio laetor; mirabar quid Te Berolini detineret cum ex novis litterariis Diario Parisiensi insertis didicissem quod Academiae istius praesidiatu abdicasses eoque munere jam fungeretur Baro de Printz.

Quod mihi arbitrium defers in Tua cum Hartsoeckero controversia, facis Tu quidem benevole sed nimium mihi tutius: non nostrum inter Vos tantas componere lites, et vereor ut tali arbitro stare velit clarissimus Tuus adversarius cui rogatus non ita quidem difficultates nonnullas objeci ex quibus me Tecum facere facile judicabit. Caeterum litteras ad ipsum et P. Orbanum Tuas hodie curavi Dusseldorpium.

When I say that it suffices that there is the closest union between God and the created, I mean by this something more than a moral union, and those who read me understand this; otherwise I should be playing with words, which is not my custom.

Thank you very much for your society's writings on China. It is now time for the supreme pontiff to say explicitly whether or not he intends and commands Chinese Christians to abstain from the customary honors that are shown to Confucius and their ancestors. If he orders this explicitly, the mission there (unless I am mistaken) will fail.

I wrote to the Most Reverend Father Bouvet some time ago in vain, and I asked what sort of books they were that I had received (which I believe to be a present from him). For his letter, sent with the books, has disappeared.⁵

Enclosed is what I say in response to the latest things from Mr. Hartsoeker.⁶ I was hoping that you would place yourself between us and act as a judge. Farewell. From Hanover, 8 July 1711.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I ask that you thank the Reverend Father Tolomei on my behalf for the books sent to me and that you declare my everlasting respect.

45. Des Bosses to Leibniz¹

[Cologne, 18 August 1711]

Most Distinguished Sir, Most Esteemed Patron,
The Peace of Christ,

For some time I was eagerly awaiting your return. Now, from your letter written on July 8, which was finally delivered the day before yesterday, I understand that you have at last arrived safely in Hanover, and I am truly elated. I was surprised that something detained you in Berlin, since I had learned from the latest pieces published in the *Journal des savants* that you had resigned as president of the Academy and that as a result Baron von Printz² was now occupying the office.

In deferring to my judgment in your dispute with Hartsoeker, you certainly act kindly but you are too trusting of me: it is not my place to settle such quarrels between you, and I fear that your esteemed adversary will not want to stand for such a judgment, since, without being asked to do so, I have presented him with several difficulties, from which he will easily judge that I side with you. Besides your letter to him, I today also took care of your letter to Father Orban in Düsseldorf.

Quae de morali necessitate deque arctissima Deum inter et creaturam unione respondes plane mihi satisfaciunt. Quomodo Adamus initio majorem quidem inclinationem ad malum quam bonum non habuerit cum creabatur, sed tunc tantum cum praeceptum urgebat, et peccatum instabat, necdum plene percipio. Unde enim illa inclinationis alteratio, an a Deo naturae et gratiae autore? At fecit hominem initio rectum nec eum utique destituerit cum gratia maxime urgebat! An ab Adamo ipso? At instante peccato, necdum culpam admisisse intelligebatur. Cum quis eliget hoc modo, videtur contradictionem implicare si eligeret alio modo, etiamsi rationes determinantes ex se non necessitent, quia aliunde implicat contradictionem, voluntatem per rationes oppositas ut pote inefficacius propositas determinari, ut ipse statuis.

Theodicaeum Tuum accepit Ptolomaeus de quo quid ipse sentiat ex ejus litteris adjunctis lubentius intelliges.

Pervenit ad nos liber, cui titulus: *Observationes mathematicae et physicae factae a Patre Francisco Noel ab anno 1684 ad annum 1708 in lucem datae Pragae anno 1710*. Autorem, nisi consilium mutaverit Septembri mense hic videbimus. Si liber Tibi visus non est (et facile Praga Lipsiam deferri potuit) exemplar quod habeo Tibi mittam. Vale Vir illustrissime et mihi Tui studiosissimo bene velle perge. Dabam Coloniae Agrippinae 18 Augusti 1711.

Illustrissimae Dominationi tuae

Devotissimus cliens

Bartholomaeus Des Bosses SJ

P.S. Quod de creatura perfectissima objicere videtur Ptolomaeus, id ergo jam ante tetigeram, et Tu abunde solvisse mihi videbaris.

Leibniz to Des Bosses

Plurimum Reverende Pater, Fautor Honoratissime

Gratum mihi est, quod partes meas contra Dn. Hartsoekerum tueris.

Cum Adamus creabatur, praevalebat quidem inclinatio ad bonum; sed suberant tamen semina futurae inclinationis ad malum: nam omnia in rebus quodammodo praestabilita sunt, et praeteritum est praegnans futuri. Ut autem Adamus talis qualis erat futurusque erat ad existentiam admitteretur, causa fuit, quod partem faceret optimae seriei possibilis.

Your responses concerning moral necessity and the closest union between God and the created are entirely satisfactory to me. I do not yet fully understand how Adam did not have a greater inclination to evil than to good in the beginning when he was created, but only when the maxim moved him and he pursued sin. For where does that change of inclination come from? From God, the author of nature and grace? But he made man upright from the beginning and will not have abandoned him when grace moved him most of all! From Adam himself? But at the moment of sinning it was not yet understood that he had become guilty. When anyone chooses in this way, it does seem to imply a contradiction if he should choose in another way, even if determining reasons do not necessitate of themselves, because it implies a contradiction from another source: that the will is determined by opposing reasons that are represented as having less force, as you yourself state.

Tolomei received your *Theodicy*. You will happily learn what he thinks of it from his letter here enclosed.

A book has reached us whose title is *Mathematical and Physical Observations Made by Father Francisco Noël between the Years 1684 and 1708, Printed in Prague in the Year 1710*.³ I shall see the author this coming September, unless he has changed his plans. If you have not seen the book (and it could easily be brought to Leipzig from Prague), I shall send you the copy I have. Farewell, most distinguished Sir, and continue to wish me, your most zealous follower, well. From Cologne, 18 August 1711.

Your Excellency's most devoted servant,

Bartholomew Des Bosses, S.J.

P.S. Because Tolomei seems to object to a most perfect creature, I had touched on this already earlier, and you seem to me to have solved the problem completely.

46. Leibniz to Des Bosses¹

[Hanover, 7 September 1711]

Most Reverend Father, Most Honored Supporter,

I am grateful that you defend my side against Mr. Hartsoeker.

When Adam was created, an inclination to good certainly prevailed; but nevertheless seeds of the future inclination to evil lay beneath the surface: for everything in things is in some way preestablished, and the past is pregnant with the future. But the reason why such an Adam as he was and was to become should be admitted into existence was that he would constitute part of the best possible series.

Ptolemaeus vester, vir insignis, videtur dubitare, an optima series rerum possibilis admitti possit, quia non datur perfectissima creatura. Atque id ego quoque concedo, sed nego seriem rerum pro creatura haberi posse, nam series infinitorum non potest pro uno toto haberi, ut alias demonstravi. Est autem series rerum infinita certe a parte posteriore ut vocant, seu caret fine, etsi non careat initio. Meo iudicio nisi daretur series optima, nihil plane crearet Deus, quia non potest agere praeter rationem, aut praeferre minus perfectum alteri perfectiori.

Caeterum gaudeo tanto viro cogitationes meas probari, quas non dubito quin multis modis emendare et perficere possit.

Sunt qui a me desiderant ut libellum Theodicaeae meae Latine edi curam, sed versionem adornare non vacat.

Quid Tourneminus, vir doctissimus et ingeniosissimus, de meditationibus meis sentiat, aliquando discere gratissimum erit.

Quod superest vale et fave. Dabam Hanoverae 7 Sept. 1711.

Deditissimus

G. G. Leibniz

P.S. Erravit Diarium Parisinum, si me Praesidio Berolinensi cessisse scripsit, Dno. Baroni de Prinzen ministro status regio ex officio incumbit cura omnium Academiarum et Scholarum sub Regis ditione Sitarum; itaque etiam res Societatis apud Regem curat et tuetur; sed quae ad studiorum profectus in Societate pertinent, ad meam curam etiamnum spectant.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Meldensis Episcopi librum Hildesia jam ad TE pervenisse confido una cum literis Clarissimi Hartsoekeri, qui corda semper oberrat eadem. Obstant videlicet Atomii carissimae ne principium Tuum magnarum veritatum sane fecundum videat. Et qui potest novi systematis parens abdicare partum suum et immitibus objectionibus tuis in praedam relinquere? A voluntate ad intellectum dum transfert libertatem, transfert et difficultatem, imo auget. Nec capio quid hoc ad Providentiae Divinae cum ho-

Your Tolomei, a remarkable man, seems to doubt whether a best possible series of things can be admitted, because there is not a most perfect creature. And I, too, concede this, but I deny that a series of things can be considered a creature; for a series of infinite things cannot be considered one whole, as I have demonstrated elsewhere. Nevertheless, a series of things is certainly infinite with respect to what is posterior, as they say, or it lacks an end, even if it does not lack a beginning. In my judgment, unless there were a best series, God clearly would have created nothing, since he cannot act without a reason, or prefer the less perfect to the more perfect alternative.

In any case, I am happy that my thoughts are approved of by such a man. No doubt he could amend and improve them in many ways.

There are those who would like me to see to it that the text of my *Theodicy* is published in Latin, but I do not have the time to prepare a translation.²

I shall be grateful to learn sometime what Tournemine, that most learned and intelligent man, thinks of my meditations.

For the rest, farewell and think kindly of me. From Hanover, 7 September 1711.

Most faithfully,

G. W. Leibniz

P.S. The *Journal des savants* was wrong if it wrote that I stepped down as president of the Berlin Academy. The care of all academies and schools in the kingdom falls upon Baron von Printz, minister of state for the king, and so he also takes care of and protects the affairs of the society on behalf of the king; but things pertaining to the advancement of studies by the society still belong to my care.

47. Des Bosses to Leibniz¹

[Paderborn, 28 January 1712]

Most Distinguished Sir, Most Revered Patron,

I trust that the book by the bishop of Meaux² has reached you from Hildesheim along with the letter of the esteemed Hartsoeker, who always takes the same wrong path.³ Clearly, his beloved atoms stand in the way of his comprehending your principle [of sufficient reason], which is undoubtedly productive of great truths. But what parent of a new system can reject his own offspring and relinquish it as a prize in the face of your withering criticisms? As long as he transfers freedom from the will to the intellect, he transfers the difficulty as well; indeed, he increases it. Nor do I un-

minis libero arbitrio dissidium faciat. Suspicio eum per *praescientiam* vel *providentiam* intelligere actum humani intellectus qui voluntatis actum praecedere debet. Sed quis ista vocabula illo in sensu usurpavit unquam?—An verum est quod tam fidenter objicit, corpus a motu, etiam celerrimo ad quietem omnimodam in instanti transire? Et frustra ad experientiam provocat cum melior iudex ratio contrarium probare videatur saltem in elasticis imo et forsitan in aliis de quo Te audire cupio, nam Hartsoekero Te (de hoc saltem) respondere nec operae pretium censeo nec ipse cupit. Mallet Te ad certamen de Kepleri Ellipsis allicere, ubi quia Te cum Newtono sentire putat, feliciter pugnare se posse auguratur atqui in dissertatione quam Theodicaeae Tuae praemisisti, principium Newtoni Tibi non probari diserte profitebaris. Quae omnia argumento sunt non visam ab illo Theodicaeam. At saltem Diarium Lipsiense lustrasset, ad quod remittebas: an Diaria illa non habet, aut Latine nescit? Et mihi nonnihil controversiae nuper cum illo fuit, cujus te arbitrum facio. Rem totam utriusque verbis recenseo.

Vous dites, Monsieur, inquiebam, que votre Element liquide n'est pas matiere cependant ce doit etre un cor[p]s, autrement vous n'eviterez pas le vuide, ce ne sera donc point *une substance dont sont pris les etres qu'on appelle esprits*; ce qui est corps ou etendue ne pouvant etre changé en esprit et si ce changement se faisoit, il faudroit dire que votre Element liquide viendrait à se diviser puis qu'il est constant que les esprits sont divisez l'un de l'autre, mon ame par exemple de la votre.

Respondit Cl. Hartsoekerus in haec verba: Je ne vois pas, Mon R. P., pourquoi les esprits ne pourroient etre divisés l'un de l'autre quoique mon premier element d'où ils seroient pris ne le fust pas. Selon vous la matiere est aussi indivisible que mon premier element puisque vous soutenez qu'il y a de la matiere par tout où il y a de l'etendue et que l'etendue est infinie. Cependant vous direz que de cette matiere se font une infinité de choses qui sont veritablement divisées l'une de l'autre. Habeo, captus sum.

Reposui: Il me paroit, Monsieur, qu'il n'y a point de vuide dans l'univers, mais il n'est pas besoing pour cela de dire avec Des Cartes que l'etendue soit infinie. Je soutiens cependant qu'elle est divisée. L'un n'est pas contraire à l'autre. Vous avez autrefois fort bien prouvé contre Mr. La Montre dans le Journal des Scavans de Paris que suivant les principes des Cartesiens il n'y pouvoit avoir de la division dans la matiere, mais je ne

derstand how this helps in the conflict between divine providence and human free will. I suspect that he understands by “foreknowledge” or “providence” an act of the human intellect that ought to precede an act of the will. But who ever used these words in that sense? Or is it true, as he so boldly objects, that a body passes completely from even the most rapid motion to complete rest in an instant? And he vainly appeals to experience when reason seems to prove a better judge of the contrary, at least in the case of elastic things and indeed perhaps in the case of other things about which I want to hear from you; but I do not think it worth the trouble for you to respond to Hartsoeker (at least on this subject), nor does he himself want this. He would rather draw you into a debate concerning Kepler’s ellipses, where, because he thinks you agree with Newton, he supposes that he can successfully engage you, notwithstanding the fact that in the discourse with which you preface your *Theodicy* you showed clearly that you do not approve of Newton’s principle.⁴ All these things are argued for in the *Theodicy*, which he has not seen. But he should at least have reviewed the *Acta eruditorum* to which you referred.⁵ Does he not have these issues, or not know Latin? I, too, recently had something of a controversy with him, of which I shall let you be the judge. I recount the whole thing using the words of each of us.

I said: “You say, Sir, that your liquid element is not matter; however, it must be a body, otherwise you will not escape the void; therefore, there will not be ‘a substance from which the beings that we call minds are taken’; that which is body or extended cannot be changed into a mind, and if this change took place, it would be necessary to say that your liquid element would come to be divided, since it is always the case that minds are divided one from another, my soul, for example, from yours.”

The esteemed Hartsoeker responded with these words: “I do not see, my Reverend Father, why minds could not be divided one from another, although my first element from which they would be taken was not. According to you, matter is as indivisible as my first element, since you assert that there is matter everywhere where there is extension and that extension is infinite. Yet you will say that from this matter there arises an infinity of things which are truly divided one from another.” I admit it, he has me.

I responded: “It would seem to me, Sir, that there is no void in the universe, but it is not necessary because of this to say along with Descartes that extension is infinite. I assert, however, that it is divided. The one claim is not contrary to the other. On another occasion you proved convincingly against Mr. La Montre in the *Journal des savants* of Paris that following the principles of the Cartesians there could not be division in matter; but I

vois point que vos preuves aient la meme force contre nous qui soutenons avec Aristote et avec Mr. de Leibniz que dans la matiere il y a des formes ou Entelechies lesquelles sans etre de pures modifications de la matiere la divisent et la diversifient. Vos deux Elemens, Monsieur, ne sont-ils point divisés l'un de l'autre? Ils ne sont donc point continus, mais bien contigus. Il n'y a point de continuité ou il y a une division entiere. Toute la matiere de l'univers est contigue, non pas toute continue. Haec ego: audi nunc quid vir clarissimus responderit.

Je vous avoue M. R. P. que mon premier element n'est que contigu avec l'autre, mais je vous dirois en meme tem[p]s que ce premier element, quoi qu'il soit contigu pourroit pourtant etre modifié en mille manieres differentes et inconnues à nos foibles lumieres, de sorte que je ne vois pas pour quoi les esprits n'en pourroient etre pris il est, par exemple, tout autre dans le corps d'un homme que dans celui d'une bete, tout autre dans celui d'un animal que dans celui d'une plante, tout autre dans un espace cubique que dans une espace spherique ou cylindrique etc. et cela seul suffit, ce me semble, pour lui faire avoir des modifications differentes. Mais veritablement ces choses et une infinité d'autres de cette nature sont au dela de notre portée. Ita ille.

Quid censes de hac mundi anima, imo forma potius? Nam et corporibus inorganicis, cubicis puta sphaericisque cum organicis communis est. An hunc oceanum quo atomi veluti totidem insulae natantes circumcinguntur ulterius explorando operae pretium fecero? An modi isti liquidum elementum non dividentes, res ipsas dividunt? Sed de Hartsoekero satis.

Quod superi bene vertant, spatiis quamvis disclusus iniquis Theodicaeam tandem vertendam suscepi auspice Te. Quid enim Tui causa non faciam? Elegantiam a me non exiges, opinor; sensum tuum, si non ubique reddidero fideliter (quod pro captu meo praestare nitar sedulo) Tu pro jure Tuo errantem in viam revocabis. En alterum specimen quod revideas. Notas addam non opere isto dignas quidem (nam qui possim) sed quales ab homine (si dicere audeo) Tibi usque ad aras amicissimo, Tui certe amatissimo expectare fas sit quanquam suppetias ab aliis eruditibus Tibi perinde addictis exquiri quos facile divinabis. Subjiciam, si ita pateris, *Dissertationis peripateticae de substantia corporea* breve quoddam *specimen* mihi dudum animo, Te hortatore, designatum, jamque suis utcumque partibus informatum, usitatarum in Scholis locutionum retinens illud quidem, sed a

do not see at all that your proofs have the same force against those of us who hold with Aristotle and Mr. Leibniz that in matter there are forms or entelechies that, without being pure modifications of matter, divide it and diversify it. Are your two elements not divided from each other, Sir? They are therefore not at all continuous but rather contiguous. There is no continuity where there is a complete division. All the matter in the universe is contiguous, not all continuous." I said these things; listen now to what the esteemed gentleman said in response.

"I admit, my Reverend Father, that my first element is only contiguous with the other, but I would say to you at the same time that this first element, though it is contiguous, could nonetheless be modified in a thousand different ways and in ways unrecognized by our feeble lights, so that I do not see why minds could not be taken from it; it is, for example, entirely different in the body of a man than in that of a beast, entirely different in that of an animal than in that of a plant, entirely different in a cubic space than in a spherical or cylindrical space, etc.; and this alone suffices, it seems to me, to make it have different modifications. But really these things and an infinity of others of this nature are beyond our reach." So he wrote.

What do you think about this soul, or rather form, of the world? For just suppose that cubic and spherical inorganic bodies have something in common with organic bodies. Will it have been worth the trouble to explore what is beyond this ocean in which atoms are surrounded like so many floating islands? Do those modes that do not divide a liquid element divide things themselves? But enough of Hartsoeker.

With your support, I have finally begun translating the *Theodicy*, despite having been kept from it for a long time—may the gods bring this to a happy end! For what will I not do on your account? I imagine that you do not demand elegance from me; and if I do not everywhere impart your sense faithfully (though I shall strive assiduously to perform to the best of my abilities), you will correct errors along the way, as is your right.⁶ And, look, here is another example of my dedication for you to think about. I shall add notes that are not in fact worthy of the work (for how could I?) but of the sort that it is reasonable to expect from a man who, I dare say, is certainly your most devoted follower and loyal to the grave, although I am seeking help from other scholars just as devoted to you, whose identities you will easily guess. I shall include, if you wish, a certain brief *Specimen of a Peripatetic Dissertation on Corporeal Substance* that I conceived a little while ago with your encouragement and that is now outlined at least in its parts.⁷ Though it of course retains the expressions commonly used in

sensu tuo quem ab Aristolelico in plerisque minimum abesse arbitror, vix recessurum. Faxo ut aliquando videas, at ea lege ut quae addi vel corrigi debebunt, moneas. Litteras a Te et Hartsoekero ultro citroque scriptas a Trivultianis vulgatas intellexi.

Miserat ad me Turnaminus Diarii Trivultiani partem illam in qua Theodicaea recensebatur sed de illa cum libris aliquot ad me ante tres septimanas Ubiis directa nihildum rescire licuit. Nollem periisse. Mittam si recuperavero. Titulum libri quomodo concipiendum censeas, a Te erudiri cupio: Mihi non displicebat *Causa Dei asserta Apologia* etc sic enim libri scopus a quovis intelligeretur, sed hunc occupaverat Epitome subjecta quae a toto opere discriminanda videtur.

Si spem esse putas detegendi vel Antuerpiae vel Parisiis Firodoandi, scribam utrolibet. Flores Tuos odorari gestio.

Bibliotheca nostra, Celsissimi Principis Ferdinandi Furstembergii, communis literatorum Maecenatis, tum viventis munificentia, tum morientis legato plurimis egregiis et elegantibus libris aucta est. Sed codicibus manuscriptis caret. Cloppenburgium Schattenio succenturiatum, opus inceptum vixque affectum reliquisse intelligo. In arce Episcopali Neuhausina servatur quidquid id est. Nam hic nihil ejusmodi reperio. Joannes Joanning (id mathematico cujus meministi nomen) duodecim circiter abhinc annis hic vivere desiit octogenario major. Westphali plerumque solertes et industrii aliqui etiam sagaces.

Christophori Bernardi Monasteriensis Episcopi vitam a Dno. de Alpen conscriptam duobus voluminibus accerso Colonia, mittendum ad Te recta, vel Hildesio per nostros. Bibliopolae vestrates plura, si volent, exempla ab Henrico Rommerskirchen Coloniensi Bibliopola ac Typographo petere poterunt.

Muysii Elementa Physica nactus dum indicem lustrum incidi in locum ubi rationes explicat a Te dissentiendi circa vim creatam motricem pag. 923 et seqq. quae vim prorsus nullam habere mihi videntur. Argumentum vero Tuum Sturmio propositum olim quod in scholio pag. 938 solvendum suscipit plane in robore suo perstat. Aut enim efficacia illa permanens entis increati est ipse Deus aut aliquid quod Deus non sit. Si Deus ipse non

the schools, I believe that it will scarcely depart from your ideas, which in most respects differ very little from those of Aristotle. I shall make sure that you see it sometime, but on the condition that you point out what ought to be added or corrected. I have learned that the letters written back and forth by you and Hartsoeker have been published in the *Mémoires de Trévoux*.⁸

Tournemine had sent me the issue of the *Mémoires de Trévoux* in which he reviewed the *Theodicy*.⁹ It (along with several books) was directed to me in Cologne several weeks ago, but so far I have been unable to find out anything about it. I would not want to lose it. I shall send it if I find it. I am interested to know how you think the title of the book should be expressed. I was leaning toward *The Case of God Defended by an Apology* etc., for in this way the scope of the book might be understood by anyone; but this title has been used for the summary of it, which it seems should be distinguished from the whole work.¹⁰

If you think there is hope of being published either in Antwerp or in Paris by Firodoandus, I shall write to either one.¹¹ I desire your work to be read.

Our library has been increased with many extraordinary and elegant books from the magnificent Prince Ferdinand of Fürstenberg, the Maeceenas of the community of letters, through his generosity in life and his legacy in death.¹² But it lacks a catalogue of the manuscripts. I understand that Cloppenburg, who took the place of Schatten, left the work begun but scarcely finished.¹³ Whatever there is in the episcopal palace of Neuhaus is being preserved. But here I find nothing like that. Johannes Johanning (whose name you recalled from mathematics) passed away some twelve years ago at more than eighty years of age. The Westphalians are generally resourceful and industrious; some are even wise.

I am ordering from Cologne the biography of Christopher Bernhard, bishop of Münster, written by Father von Alpen, which will be sent to you either directly or via Hildesheim by our brethren.¹⁴ Your booksellers will be able to get many copies if they wish from Henry Rommerskirchen, the Cologne bookseller and printer.

I chanced upon Muys's *Elements of Physics*,¹⁵ and, while looking at the index, I discovered the place where he explains the reasons for disagreeing with you about created motive force (pages 923 and following), which seem to me to have absolutely no force. Indeed, the argument you proposed to Sturm some time ago, which he tries to counter in the scholium on page 938, clearly remains solid.¹⁶ For that permanent efficacy of an uncreated being is either God himself or something that is not God. If it is not

est, igitur aliquid esse creatum oportebit uti contendis; sin ipse Deus est, cum in Deo utpote simplicissimo ente nulla omnino varietas sit, sed in eo omnia ubique uniformia et identificata (nisi cum Vorstio modos et accidentia in Deum inducere voluerit) quomodo varietatis in materia *causa formalis* sive varietas ipsa formaliter esse poterit? Ut taceam eam denominationem fore prorsus extrinsecam materiae nisi Deum esse materiae formam statuatur.

Sed nec solide probat corpoream substantiam in extensione consistere. Argumenta etiam contra hanc suam sententiam militantia, quae solvere nititur, lustravi obiter. Miror Tua esse praeterita, caeteris, ut mihi quidem videtur longe potiora et nulle ratione diluenda.

Ut tamen fatear quod res est, illud interim ex hujus libro percipio commodi quod in sententia passim apud nos recepta confirmet nempe: extensionem accidens esse reale non modale tantum; accidens quidem quia ens primum sive substantiam jam constitutam supponit, nec illud constituit uti materia et Entelechia constituunt; reale vero, non modale, quia sicuti nihil quod activum de se non sit modificatione sola, activum fieri non potest. Ita concipere non possum quomodo id quod de se extensum non est (uti de se extensae non sunt materia et formae) a modo solo habere possit ut fiat extensum. Hoc unum accidens reale ac materiae coevum si mihi concesseris, reliqua ad modos relegare non verebor. Vale Vir summe, meusque conatus ne aspernare. Dabam Paderbornae 28 Januarii 1712.

Illustrissime Dominationi Tuae

Ex asse devotus cliens

Bartholomaeus Des Bosses SJ

P.S. Ante dies aliquot ab Orbano litteras accepi sat vetustas, quibus dicebat se pridie ad Te scripsisse. Si quid ipsi Tibi notandum occurret circa Theodicaeam ut significes expecto.

Leibniz to Des Bosses

Reverendissime Pater Fautor Honoratissime

Mire satisfacit Tua versio, et originale textum passim vincit. Paucissima quaedam notavi, qualia et in meis soleo, ubi relego. Et cum tam fideliter tam eleganter exprimas, atque etiam interdum illustres sensa; non

God himself, then it will be necessary that something was created just as you insist; but if it is God himself, since there is no variety at all in God, inasmuch as he is a maximally simple being, and in him everything everywhere is uniform and identical (unless, with Vorstius, one wishes to introduce modes and accidents in God),¹⁷ how will it be possible for there to be a *formal cause* of variety in matter, or variety itself formally? To say no more, he establishes that this denomination will be absolutely extrinsic to matter, unless God is the form of matter.

Moreover, he does not prove convincingly that corporeal substance consists in extension. In the meantime I have also reviewed the opposing arguments—which he tries to overturn—against this view of his. I am amazed that your old arguments are, as indeed it seems to me, far stronger than the others and should not be weakened in any respect.

Still, that I may acknowledge what is the case, I nonetheless find something profitable in this book, in that I am confirmed in the view accepted far and wide among us, namely, that extension is a real accident and not just a modal one. It is indeed an accident because it presupposes a primary being or substance that is already constituted, and it does not constitute a substance as matter and entelechy do. On the other hand, it is real and not modal because, just as nothing that is not active in itself can become active by a modification alone, so I cannot conceive how that which is not extended in itself (as matter and forms are not extended in themselves) could have the power to become extended from a mode alone. If you will concede that this one accident is real and coeval with matter, I shall not fear relegating the rest to the level of modes. Farewell, distinguished Sir, and please do not spurn my efforts. From Paderborn, 28 January 1712.

Your Excellency's wholly devoted servant,

Bartholomew Des Bosses, S.J.

P.S. A few days back I received a somewhat belated letter from Orban in which he said that he had written to you the previous day. If anything occurs to you to be noted concerning the *Theodicy*, I expect that you will let me know.

48. Leibniz to Des Bosses¹

[Hanover, 15 February 1712]

Most Reverend Father, Most Honored Supporter,

Your translation succeeds marvelously and in places surpasses the original text. I have marked only a few passages, as is my custom when I reread even my own writings. Since you express the thoughts so faithfully

est cur crebro per particulas subnata mittas; suffeceritque aliquando justam partem ubi vacaverit venire. Unum addidero, interdum fugientiores videri literarum characteres, quod ideo dico, ne fortasse nova sit descriptione opus: neque enim descriptiones illae ab hominibus mercenariis sine mendis fieri solent, quae interdum fugiunt revidentem. Et vero pleraque omnia hactenus ita scripta sunt ut novo exemplari non videatur opus.

Quae Dn. Hartsoekero nostro responderim in adjecta Epistola vides. Probat ille et non probat meum rationis sufficientis principium; probat generatim, non probat exertim; diceret aliquis de schola, probare in signato non in exercito actu. Dicerem (si mavis) probare magis quam adhibere. Itaque non potui quin ei paulo clarius et per exempla similia ostenderem, quantum ab eo, id est a recta ratione decedat. Perplacet quod contra meum principium Transitus non saltantis id ipsum allegat, quo pulchre atomi impugnantur. Et praeclare praevidisti, experientiam quam affert, veram non esse. Omnia corpora dura nobis nota Elastica sunt, adeoque cedunt et vim incurrentis per gradus paulatim infringunt; etsi hoc non semper satis sensibile sit, cum scilicet valde dura sunt corpora, et magna se promptitudine restituunt. Sed si dantur atomi, transitus fit in instanti contra ordinem rerum. Argumentum quidem hoc olim adhibitum contra Atomos non fuit, sed tamen non spernendae est efficaciae apud intelligentes.

De primo suo Elemento, seu materia summe fluida, ita interdum loquitur, ac si corpus non esset, sed hoc fortasse in logomachiam abibit. Nam movetur, et impellit, impelliturque, et extensionem habet et partes etiam aliae ab aliis discedunt. Sed quamdiu in hoc suo fluido nihil agnoscit, nisi extensionem, figuram et harum variationem in motu, non poterit inde educere perceptionem. Ait quidem nos non posse scire quarum rerum tale fluidum sit capax, sed quamdiu in eo nihil aliud quam dicta collocamus, optime perspicimus quorum capax sit. Nec modificatio perfectiones addere potest, cum harum tantum limites variare possit. Quod si in illo fluido collocat aliquod attributum altius, ad nostra vel eis vicina redibit. Sed ipse discrimen rei substantialis et modificationum, aliaque non imaginatione, sed intelligentia comprehendenda, non satis inspexisse videtur aut curare.

and elegantly, and even clarify them sometimes, there is no reason for you to send your work frequently in small bits; it will suffice if now and then a completed part comes, whenever there is time. Let me add one thing: sometimes the handwriting seems rather rushed. I mention this, so that perhaps there may be no need for a new transcription, for copies made by paid workers are usually not without errors, which sometimes escape proofreading. And, in fact, so far nearly everything has been written in such a way that there seems no need for a fair copy.

You will see from the enclosed letter what I have said in response to our Mr. Hartsoeker. He approves, and does not approve, of my principle of sufficient reason; he approves of it in principle but not in practice. Someone from the schools might say that he approves of it potentially but not actually. I should say, rather, that he approves of it more than he makes use of it. Thus, I could not stop myself showing a little more clearly and by means of similar examples how far he departs from it, that is, how far he departs from right reason. It is very pleasing that he adduces against my principle that change does not occur through a leap the very point by which atoms are elegantly refuted. And you have foreseen very clearly that the experiment he reports is not true. All hard bodies known to us are elastic, and thus they give way and weaken an opposing force gradually and through degrees, although this is not always sufficiently apparent, since admittedly there are very hard bodies that restore themselves extremely quickly. Yet, if there were atoms, change would occur in an instant, contrary to the order of things. This argument, to be sure, has not been used often against atoms, but that which is influential among the learned should not be dismissed.

Hartsoeker sometimes speaks about his primary element, that is, a perfectly fluid matter, as though it were not a body; but this will perhaps be reduced to a dispute about words. For it moves, it impels and is impelled, and it has extension, and even parts that can be separated from each other. But as long as he recognizes nothing in this fluid of his except extension, figure, and their variation in motion, he cannot derive perception from this source. He says, to be sure, that we cannot know what the capacities of this fluid are, but so long as we endow it with only the aforementioned properties, we perceive perfectly clearly what its capacities are. A modification cannot add perfections, since it can only vary their limits. But if this fluid is endowed with some more basic attribute, it will reduce to our account or something similar to it. Yet, it seems that he has not sufficiently considered, or paid attention to, the difference between a substantial thing and modifications, and other things that must be understood by the intellect rather than by the imagination.

Amicus qui in Actis Lipsiensibus Muysii librum recensuit, ostendit etiam, eum plane intactam reliquere vim argumenti mei pro necessitate Entelechia¹ materiam diversificantis, et nonnulla affert tuis plane consentientia.

His et similibus facile convinci posset Dn. Hartsoekerus, nisi invictus esset. Si spiritus nihil aliud sunt quam collectio quaedam, et ut sic dicam gutta fluidi, non magis apparet quomodo perceptionem producant, quam si eos cum Epicuro ex atomis globularibus composuisset, nec unquam reddet rationem diversitatis. Sed postquam semel sibi persuasit duo esse primaria materiam perfecte duram, et perfecte fluidam, quae scilicet imaginationi blandiuntur; pulchrum putavit ex uno ducere spiritus, ex altero corpora; quomodo inde ducantur spiritus, non sollicitus. Ita scilicet solent, qui hypotheses suas amant. Non potui non hunc parentis amorem in foetum, in novissima Epistola ei nonnihil objicere, et quia liticulae taedio captus videtur, finem ei simul imponere: interea nihil obstat opinor quin Epistolae novissimae, et Hartsoekerianae et meae, R. P. Tournemino communicari possint.

Dissertationem Tuam de substantia corporea legam lubentissime. Si substantia corporea aliquid reale est praeter monades, uti linea aliquid esse statuitur praeter puncta; dicendum erit, substantiam corpoream consistere in unione quadam aut potius uniente reali a Deo superaddito monadibus, et ex unione quidem potentiae passivae monadum, oriri materiam primam, nempe extensionis et antitypiae, seu diffusionis et resistentiae exigentiam; ex unione autem entelechiarum monadicarum, oriri formam substantialem, sed quae ita nasci et extingui possit, et cessante illa unione extinguetur, nisi a Deo miraculose conservetur. Talis autem forma tunc non erit anima, quae est substantia simplex et indivisibilis. Et forma ista, proinde ac materia est in fluxu perpetuo, cum nullum punctum revera in materia assignari possit, quod ultra momentum eundem locum servet, et quod non a quantumvis vicinis recedat. Sed anima in suis mutationibus eadem persistit, manente eodem subjecto, quod secus est in corporea substantia. Itaque alterutrum dicendum est: vel corpora mera esse phaenomena, atque ita extensio quoque non nisi phaenomenon erit, solaeque erunt monades reales, unio autem animae percipientis operatione in phaeno-

The friend who reviewed Muys's book in the *Acta eruditorum* also shows that Muys leaves fully intact the force of my argument for the necessity of entelechies that differentiate matter, and he offers some other considerations that are in complete agreement with your views.

Mr. Hartsoeker could be convinced easily by these and similar things if he were not so stubborn. If spirits are nothing more than a kind of collection or, so to speak, drops of fluid, it is no more apparent how they produce perception than if, like Epicurus, he composed them from spherical atoms; nor does he ever give a reason for their diversity. But as soon as he persuaded himself that there are two primary elements, perfectly hard matter and perfectly fluid matter, which certainly appeals to the imagination, he found it beautiful that spirits should be derived from one and bodies from the other. He is not concerned with how spirits are derived from this source, which indeed is characteristic of those who love their hypotheses. I could not stop myself from making some objection to this parental love of offspring in my latest letter to him and, since he seems captivated by the tediousness of a trivial dispute, at the same time putting an end to the matter. Nevertheless, as far as I am concerned, there is no reason why these latest letters, mine and Hartsoeker's, cannot be communicated to Father Tournemine.

I shall read with great pleasure your dissertation on corporeal substance. If corporeal substance is something real over and above monads, as a line is taken to be something over and above points, we shall have to say that corporeal substance consists in a certain union, or rather in a real unifier superadded to monads by God, and that from the union of the passive powers of monads there in fact arises² primary matter, which is to say, that which is required for extension and antitypy, or for diffusion and resistance. From the union of monadic entelechies, on the other hand, there arises substantial form; but that which can be generated in this way, can also be destroyed and will be destroyed with the cessation of the union, unless it is miraculously preserved by God. However, such a form then will not be a soul, which is a simple and indivisible substance. And this form, just like matter, is in perpetual flux, since in fact no point can be designated in matter that preserves the same place for more than a moment and does not move away from neighboring points, however close. But a soul in its changes persists as the same thing, with the same subject remaining, which is not the case in a corporeal substance. Thus, one of two things must be said: either bodies are mere phenomena, and so extension also will be only a phenomenon, and monads alone will be real, but with a union supplied by the operation of the perceiving soul on the phenome-

meno supplebitur; vel si fides nos ad corporeas substantias adigit, substantiam illam consistere in illa realitate unionali, quae *absolutum aliquid* (adeoque substantiale) etsi fluxum, uniendis addat. Et in hujus mutatione collocanda esset transsubstantiatio vestra, monades enim revera non sunt hujus additi ingredientia, sed requisita; etsi non absoluta metaphysicaque necessitate, sed sola exigentia ad id requirantur. Itaque mutata licet substantia corporis, monades salvae esse poterunt, fundataque in iis phaenomena sensibilia. Accidens non modale videtur aliquid difficile explicatu nec de extensione id capio. Illud dici potest etsi monades non sint accidentia, accidere tamen substantiae unionali, ut eas habeat (physica necessitate) uti corpori accidit, ut a corpore tangatur, cum corpus tamen accidens non sit. Extensio corporis nihil aliud esse videtur, quam materiae continuatio per partes extra partes, seu diffusio. Ubi autem supernaturaliter cessabit tò *extra partes*, cessabit etiam extensio quae ipsi corpori accidit; solaque supererit extensio phaenomena in monadibus fundata, cum caeteris quae inde resultant, et quae sola existerent, si non daretur substantia unionalis. Si abesset illud monadum substantiale vinculum, corpora omnia cum omnibus suis qualitatibus nihil aliud forent quam phaenomena bene fundata, ut iris aut imago in speculo, verbo, somnia continuata perfecte congruentia sibi ipsis; et in hoc uno consisteret horum phaenomenorum realitas. Monades enim esse partes corporum, tangere sese, componere corpora, non magis dici debet, quam hoc de punctis et animabus dicere licet. Et Monas, ut anima, est velut mundus quidam proprius, nullum commercium dependentiae habens nisi cum Deo. Corpus ergo si substantia est, est realisatio phaenomenorum ultra congruentiam procedens.

Quodsi omnino nolis Accidentia haec Eucharistica esse mera phaenomena, poterit dici, esse fundata in Accidentali aliquo primario, nempe non quidem in Extensione, quae manere non potest, sed in punctis hujus Extensionis ad Monades respondentibus, sublata unione continuum ex punctis constituyente; atque adeo sublatis Lineis et Figuris continuis; qualitatibus autem et caeteris realibus accidentibus manentibus; ope remanentium punctorum accidentalium, demta continuitate, quae a realitate unionali, seu vinculo substantiali pendeat. Et cessante ejus diffusionem per partes extra partes cessabat. Itaque puncta accidentalia possunt considerari, ut primum accidens, quod sit caeterorum Basis, et quodammodo non modale, quod de Extensione seu diffusionem materiae continua dici nequit.

non; or, if faith drives us to corporeal substances, this substance consists in that unifying reality, which adds *something absolute* (and therefore substantial), albeit impermanent, to the things to be unified. And your transubstantiation must be located in the change of this, for monads are not really ingredients of this added thing, but requisites, although they are required for it not by an absolute and metaphysical necessity, but only by exigency.³ Consequently, although the substance of the body is changed, the monads can be saved, along with the sensible phenomena founded on them. A nonmodal accident seems difficult to explain, and I do not accept this in the case of extension. It can be said that, although monads are not accidents, nevertheless it is an accident of the unifying substance that it has them (by a physical necessity), just as it is an accident of a body that it is struck by a body, when nevertheless a body is not an accident. The extension of body seems to be nothing but the continuation of matter through parts outside of parts, that is, diffusion. Yet, if the “outside of parts” ceases supernaturally, the extension that is an accident of body will cease also. Then there will remain only extension as a phenomenon founded on monads, along with the other things which result from them, and which would alone exist, if there were no unifying substance. If that substantial bond of monads were absent, then all bodies with all their qualities would be only well-founded phenomena, like a rainbow or an image in a mirror—in a word, continuous dreams that agree perfectly with one another; and in this alone would consist the reality of those phenomena. For it should no more be said that monads are parts of bodies, that they touch each other, that they compose bodies, than it is right to say this of points and souls. And a monad, like a soul, is, as it were, a certain world of its own, having no relationship of dependence except with God. Therefore, if a body is a substance, it is the realization of phenomena going beyond their agreement.

But if you do not want these eucharistic accidents to be in any way mere phenomena, it could be said that they are grounded in something that is accidental and primary, not of course in extension, which cannot endure, but in points of this extension corresponding to monads, with the union that makes a continuum from the points removed and, so, with continuous lines and figures removed. But qualities and other real accidents would remain by virtue of the enduring accidental points, though without continuity, which depended upon the unifying reality or substantial bond and which ceased with the cessation of its diffusion through parts outside of parts. Thus, accidental points can be considered primary accidents, which are the basis of the rest, and are in some way nonmodal, which cannot be said of extension or the continuous diffusion of matter.

Imo re magis expensa video jam et ipsam Extensionem salvari, atque adeo Tuam vestra explicandi sententiam admitti posse, si quis phaenomena nolit. Nam ut puncta accidentalia admitti possunt; ita poterit etiam, imo fortasse tunc debebit admitti eorum unio. Ita habemus Extensionem accidentalem absolutam. Sed talis extensio formaliter quidem dicet diffusionem partium extra partes, id autem quod diffundetur non erit materia seu substantia corporis formaliter sed tantum existentialiter. Ipsum autem Formale quod diffunditur erit localitas, seu quod facit situm, quod ipsum opus erit concipere tanquam aliquid absolutum. Itaque jam credo non pugnabimus, modo monades mutationi illi substantiae corporis supernaturali non involvas; praeter ullam necessitatem, cum eam ut dixi non ingrediuntur. Uti etiam secundum vos ipsos Anima Christi in Transsubstantiatione non mutatur, nec succedit in substantiae panis locum. Idem dixerim de caeteris Sanctissimi corporis monadibus. Interim ut verum dicam mallem Accidentia Eucharistica explicari per phaenomena; ita non erit opus accidentibus non modalibus, quae parum capio.

Subtiliora paulo sunt quaedam, quae de Deo optima eligente Ruizius et Martinus Perezius vester habent, et indigerent interpretatione: in summa tamen a meis non valde abhorrere videntur. Itaque multas pro communicatione gratias ago.

Ago etiam plurimas pro Meldensis Episcopi instructione pastoralis, quam percurri, et subtilem profundamque deprehendo. Illud vereor, ne plurima, quae in Jansenio reprehenduntur, sint ipsius Augustini, qui ipsemet etiam miram illam interpretationem habet, quod Deus non velit salvare singula generum, sed genera singulorum.

Titulum tentaminum Theodicaeae nisi aliter judicas, servari posse putem; est enim Theodicaea quasi scientiae quoddam genus, doctrina scilicet de justitia (id est sapientia simul et bonitate) Dei.

Quaenam est illa tandem definitio Romana causae Sinensis, de qua multum sermonem esse intelligo, et cui se vestri Romae submittere? Si Turnoniana decreta confirmantur sine moderatione, et nisi curia Romana rem artificio aliquo involvit, vereor ne Sinensis missio pessum eat, quod nolim. Nescio an R. P. Turnemino significaveris me Annales molientem

Indeed, after fuller consideration, I see now that extension itself is saved, and thus your way of explaining your view can be admitted, if one objects to phenomena. For just as accidental points can be admitted, so we could also admit their union;⁴ indeed perhaps then we shall have to do so. In that case, we shall have an absolute accidental extension, and such an extension formally will indeed be called a diffusion of parts outside of parts, but that which is diffused will be the matter or substance of body not formally but only exigently. The formal element itself that is diffused will be locality, or that which produces situation, which itself will have to be conceived as something absolute. And so now, I believe, we shall not be at odds, provided you do not involve monads in the supernatural change of the substance of a body, for which there is no necessity, since, as I have said, they are not ingredients of it—just as, even according to your church, the soul of Christ is not changed in transubstantiation and does not take the place of the substance of the bread. I should say the same thing about the other monads of the most sacred body. Nevertheless, to tell the truth, I should prefer that the eucharistic accidents be explained through phenomena; in this way, there will be no need for nonmodal accidents, which I do not sufficiently understand.

Some of the views held by Ruiz and Martin Perez of your order concerning God's choice of the best are rather subtle and would require interpretation.⁵ Nevertheless, on the whole, they do not seem to differ greatly from my own. For that reason, I am very grateful to you for sharing them with me.⁶

I am also very thankful for the pastoral instruction of the bishop of Meaux,⁷ which I briefly scanned, and which I find subtle and profound. I fear that many of the things reproved in Jansen are due to Augustine himself, who even has the remarkable interpretation that God does not will to save individuals of different kinds, but kinds of individuals.⁸

Unless you decide otherwise, I believe *Essays on Theodicy* can be kept as the title; for theodicy is like a certain kind of science, namely the doctrine of the justice (that is, of the wisdom together with the goodness) of God.

What is the decision from Rome, finally, regarding the Chinese affair, about which I understand there to have been much discussion, and to which your members in Rome have submitted themselves? If Tournon's decrees are confirmed without being moderated, and if the Roman curia does not veil the matter with some cunning, I fear the Chinese mission may be lost, which I do not want. I do not know whether you have indicated to Father Tournemine that, in the composition of the *Annals*, I have

inde ab initio regni Caroli M. jam Carolingos ultra, usque ad Saxones Reges vel Imperatores pervenisse: qua occasione etiam papissam discutiendi necessitas fuit. Quodsi R. P. Daniel in suis quos sub manibus habet Francorum Annalibus, huc usque etiam processit; in multis credo convenimus, et si qua superessent dubia, possemus conferre. Chronologiam sic satis constituisse mihi videor. Quod superest vale et fave. Dabam Hanoverae 15 Febr. 1712.

deditissimus

Godefridus Guilielmus Leibnitius

P.S. Venit aliquando in mentem optare, ut virorum vestrae Societatis in rebus Mathematicis versatorum ope observationes Variationis Magneticae per orbem, continuato annorum studio collataque opera instituerentur, quia res summi est momenti ad Geographiam et Navigationes; et a nullis aliis commodius fieri posset. Post Gilbertum Anglum qui primus hujus doctrinae fundamenta posuit, nemo melius de Magneticis observationibus meritis est, quam vestri quorum etiam justa opera extant; Cabaeus, Kircherus, Leotaudus alii. Quodsi vestri per orbem inde a Kircheri temporibus quotannis, ubicunque Mathematicum periti agunt, sive fixis sedibus, sive in itineribus, observassent quatenus sit tam Declinatio Horizontalis, quam inclinatio verticalis Magnetica, et observationes in literas retulissent; haberemus hodie Thesaurum observationum ex quibus fortasse jam tum conjici ac praedici posset, saltem in aliquot annos, quae in plurimis locis debeat esse variatio. Unde observata variatione in medio mari, conjunctaque cum poli elevatione haberi locus posset; et tandem erui limites, periodi, leges variationis, et fortasse etiam ratio tanti arcani. Nihil autem prohibet quod hactenus neglectum est, adhuc curari et saltem consuli posteritati, uti arbores venturis plantamus; saltemque prohibere ne aliquis post multos annos de praesente neglectu queri jure possit, ut nos nunc de praeterito querimur. Itaque propemodum audeo a Te petere, ut rem ad R^{mum}. Patrem Ptolemaeum (cum multa a me salute) deferas, ejusque consilium expetas.

[Supplementary Study]

Si corpora sunt phaenomena, et ex nostris apparentiis aestimantur, non erunt realia; quia aliter aliis appareant. Itaque realitas corporum, spatii,

reached from the beginning of the reign of Charlemagne, past the Carolingians, to the Saxon kings or emperors—at which point it was also necessary to destroy the myth of the popess.⁹ But if the Reverend Father Daniel has also advanced to this point in the annals of the French on which he is working, then I believe we shall agree on many things, and if any doubts remain, we could confer on them.¹⁰ It seems to me that in this way we shall have sufficiently established the chronology. For the rest, farewell and think kindly of me. From Hanover, 15 February 1712.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. It occurred to me once to wish that, with the help of members of your society who were trained in mathematics, observations of the magnetic variations around the Earth might be organized. These variations would be monitored continuously over the years and collected in books, because the matter is of the greatest importance for geography and navigation, and it could not be done more easily by others. After the Englishman Gilbert, who first laid down the foundations of magnetic theory, no one has contributed more to magnetic observations than your members, Cabeil, Kircher, Léotaud, and others, from whom solid works have also appeared.¹¹ And if your members, at the annual intervals recommended by Kircher, had made observations around the Earth wherever those trained in mathematics are living (whether in fixed locations or on voyages) of both the magnetic horizontal declination and the vertical inclination, and had related the observations in letters, we would today have a repository of observations, from which it could perhaps then already be conjectured and predicted, at least for several years, what the variations should be in many places. From this, when the observed variation in the middle of the ocean was added, together with the elevation of the pole, the position could be known; and finally, we could uncover the limits, periods, and laws of the variation, and perhaps even the explanation of so great a mystery. But nothing prevents what has been neglected thus far from being a concern, or at least an object of reflection, for posterity; just as we plant trees for future generations, or at least take precautions lest anyone many years henceforth could with justice complain about the neglect of the present as we now do about that of the past. For this reason, I almost dare to ask you to bring the matter up with the Most Reverend Father Tolomei (along with a warm greeting from me) and to request his advice.

[Supplementary Study]¹²

If bodies are phenomena, and are judged by our appearances, they will not be real, since they will appear differently to others. Thus, the reality of

motus, temporis, videtur consistere in eo ut sint phaenomena Dei, seu objectum scientiae visionis. Et inter corporum apparitionem erga nos et apparitionem erga Deum discrimen est, quodammodo quod inter scenographiam et ichnographiam. Sunt enim scenographiae diversae pro spectatoris situ, ichnographia seu geometrica repraesentatio unica est; nempe Deus exacte res videt quales sunt secundum Geometricam veritatem; quamquam idem etiam scit quomodo quaeque res cuique alteri appareat, et ita omnes alias apparentias in se continet eminenter.

Porro Deus non tantum singulas monades et cujuscunque Monadis modificationes spectat, sed etiam videt earum relationes, et in hoc consistit relationum ac veritatum realitas. Ex his una ex primariis est duratio, seu ordo successivorum, et situs seu ordo coexistendi, et commercium, seu actio mutua, dum nempe concipitur Monadum dependentia invicem idealis; situs autem immediatus est praesentia. Ultra praesentiam et commercium accedit connexio, quando invicem moventur. Per quae res nobis unum facere videntur, et revera veritates de toto pronuntiari possunt, quae etiam apud Deum valent. Sed praeter has relationes reales, concipi una potest perfectior per quam ex pluribus substantiis oritur una nova. Et hoc non erit simplex resultatum, seu non constabit ex solis relationibus veris sive realibus, sed praeterea addet aliquam novam substantialitatem seu vinculum substantiale, nec solius divini intellectus, sed etiam voluntatis effectus erit. Hoc additum monadibus non fit quovis modo, alioqui etiam dissita quaevis in novam substantiam unirentur, nec aliquid oriretur determinati in corporibus contiguus; sed sufficit eas unire monades, quae sunt sub dominatu unius seu quae faciunt unum corpus organicum, seu unam Machinam naturae. Et in hoc consistit vinculum metaphysicum animae et corporis, quae constituunt unum suppositum et huic analogia est unio naturarum in Christo. Et haec sunt quae faciunt unum per se, seu unum suppositum.

Res sunt aut concreta aut abstracta. Concreta sunt substantiae aut substantiata. Omnis substantia vivit. Substantiae sunt simplices aut compositae. Substantiae simplices seu Monades sunt intelligentes vel irracionales. Intelligentes dicuntur Spiritus et sunt vel increatus vel creatus. Creatus est vel Angelicus vel humanus, qui et Anima appellatur. Rursus Monades in-

bodies, space, motion, and time seems to consist in this: that they are the phenomena of God, that is, the object of his knowledge of vision.¹³ And the difference between the appearance of bodies with respect to us and their appearance with respect to God is in some way like the difference between a drawing in perspective and a ground plan. For whereas drawings in perspective differ according to the position of the viewer, a ground plan or geometrical representation is unique. God certainly sees things exactly such as they are according to geometrical truth, although likewise he also knows how each thing appears to every other, and thus he contains in himself eminently all the other appearances.

Moreover, God not only considers single monads and the modifications of any monad whatsoever, but he also sees their relations, and the reality of relations and truths consists in this.¹⁴ Foremost among these relations are duration (or the order of successive things), situation (or the order of co-existing),¹⁵ and intercourse (or reciprocal action), admittedly provided that the ideal dependence of monads on one another is conceived; but immediate situation is presence. In addition to presence and intercourse, connection is added when they are moved with respect to one another. Through these [relations], things seem to us to form a unity, and truths in fact can be expressed concerning the whole that are also valid according to God. But over and above these real relations, a more perfect relation can be conceived through which a single new substance arises from many substances. And this will not be a simple result, that is, it will not consist in true or real relations alone; but, moreover, it will add some new substantiality, or substantial bond, and this will be an effect not only of the divine intellect but also of the divine will. This addition to monads does not occur in just any way; otherwise any scattered things at all would be united in a new substance, and nothing determinate would arise in contiguous bodies. But it suffices that it unites those monads that are under the domination of one monad, that is, that make one organic body or one machine of nature. And in this consists the metaphysical bond of soul and body, which constitute one complete substance, and an analogy to this is the union of natures in Christ. And these are the things that make a *per se* unity or one complete substance.

Things are either concrete or abstract.¹⁶ Concrete things are either substances or substantiated. All substances are living. Substances are either simple or composite. Simple substances or monads are either intelligent or nonrational. Intelligent monads are called spirits and are either uncreated or created. A created spirit is either angelic or human, which is also called a soul. Again, monads can be understood to be either separated, like God

telligi possunt separatae, ut Deus, et quorundam ex sententia Angelus; vel incorporatae, seu Animae, et sunt nobis notae Anima rationalis et irrationalis. Monades irrationales sunt vel sentientes vel tantum vegetantes. Substantiae compositae sunt quae unum per se constituunt ex anima et corpore organico quod est Machina naturae ex Monadibus resultans. Substantiata sunt aggregata sive naturalia sive artificialia, connexa vel inconnexa. Plures substantiae possunt constituere unum suppositum, imo et plura substantiata, corporis aut substantiae cum substantiatis, v.g. animae cum organis corporis. Res abstractae sunt absolutae aut respectivae, absolutae essentiales aut adjectitiae. Essentiales sunt primitivae ut vis activa et passiva; vel derivativae seu affectiones quae prioribus non nisi relationes addunt. Adjectitiae sunt per se seu naturales (quod res exigit et habet nisi impediatur) vel quae tribuuntur per accidens. Et tales sunt modificationes, nempe qualitates et actiones. Respectivae sunt relationes. Sunt quaedam entia composita ex abstractis praecedentibus, velut ex essentialibus, naturalibus, modificationibus, relationibus, ita erunt accidentia aggregata.

Termini latius patent quam res, nam eidem rei plures termini tribuuntur, veluti Homo est doctus, prudens, ridens.

Cur homo magis substantia quam doctus; aut cur animal magis substantia quam rationale. Nempe rem involvit, ut si dicam Animal id est res animalis, Rational id est res rationalis. Sed haec non omnibus tribui solent, nec ex omnibus facimus vocabula substantiva, etsi possemus pro Albus facere albion id est res alba. Sed an Albion in praedicamento substantiae? Non putem, neque enim omnia quae subjecto albo tribui possunt sunt modificationes albedinis, sed quae homini sunt modificationes humanitatis. NB.

Des Bosses to Leibniz

Illustrissime vir Patrone Colendissime

Nunc demum respondeo litteris Tuis mense Februario ad me datis, quae tanto gratiores fuere quanto prolixiores. Incipio a quaestione de corporibus, quam in Tuis maxima cum satisfactione perlegi, nec minore cum attentione meditatus sum. Ais alterutrum dicendum; vel corpora mera esse

(and, in the opinion of some, angels), or embodied, that is, souls; and both rational and nonrational souls are known to us. Nonrational monads are either sentient or only vegetative. Composite substances are those that constitute a *per se* unity composed of a soul and an organic body, which is a machine of nature resulting from monads. Substantiated things are aggregates that are either natural or artificial, connected or unconnected. Many substances can constitute one complete substance, as indeed can many substantiated things of a body or substances together with substantiated things, for example, souls with the organs of a body. Abstract things are either absolute or relative, absolutes either essential or adjectival. Essential things are primitive, like active and passive force, or derivative, that is, affections, which only add relations to the prior things. Adjectival things are either *per se*, that is, natural (which a thing demands and has unless prevented), or are attributed accidentally. And such are modifications, that is, qualities and actions. Relative things are relations. They are certain entities composed from the preceding abstractions, as for example from essences, natures, modifications, relations; thus they will be aggregated accidents.

Terms extend further than things, for many terms can be attributed to the same thing; for example, a man is learned, prudent, laughing.

Why is man more truly a substance than being learned? Or why is animal more truly a substance than being rational? Obviously, it involves a thing, as if I were to say, "animal, that is, animal thing," "rational, that is, rational thing." But it is not customary to attribute this to everything, nor do we form substantival words from all words, although in place of "white" we could say "the white," that is, "white thing." But is "the white" in the category of substance? I do not think so, for everything that can be attributed to a white subject is not a modification of whiteness, but those things that can be attributed to a human being are modifications of humanity. N.B.

49. Des Bosses to Leibniz¹

[Paderborn, 20 May 1712]

Most Distinguished Sir, Most Revered Patron,

I am now finally responding to the letter you sent me in the month of February, which was all the more pleasing because of its length. I begin with the question concerning bodies, which I examined with the greatest satisfaction in your letter, and which I have meditated upon with no less attention. You say that one of two things must be said: either bodies are mere

phaenomena atque ita extensio non nisi phaenomenon erit, vel monadibus superaddi realitatem quandam unionalem quae absolutum aliquid (adeoque substantiale) etsi fluxum uniendis (monadibus) addat. Hanc disjunctivam admitto quoad rem ipsam. Sed subsumo atqui non prius, ergo posterius.

Et quidem si corpora mera sint phaenomena verum erit Zenonis Paradoxum omnem verum propriumque motum negantis. Nam si nulla sese tangant, neque movebuntur. Ad hoc disjunctivae membrum negandum satis esse mihi fundamenti videtur, philosophorum omnium iuxta ac rudium praejudicium, qui non dubitant in corpore aliquid amplius esse quam phaenomena, id est somnia continuata, quantumvis perfecte sibi congruentia quod adeo verum est ut Malbranchius qui corporum existentiam demonstrari posse negat, nec ipse diffiteri id videatur: nam dum istud inficiatur, non de phenomēnis istis loquitur, quae tam certa sunt nobis quam sua cuique perceptio. Protestatur autem diserte se non dubitare quod dentur corpora illa quae demonstrari non posse contendit. Je le crois comme bien prouvé, inquit, mais mal démontré. Je le crois même comme démontré mais supposant la foy: censesne illum de solis phaenomenis hic loqui?

Superest itaque ut absolutum aliquid admittamus in quo phaenomenorum realizatio consistat. Id Tu substantiam vocas; ego accidens sed de re credo non erit Litigium. Accidens voco quicquid substantiam completam per se praesupponit ita ut sine illa saltem naturaliter esse non possit. Atqui unionale illud absolutum praesupponit substantiam completam sive monadas sine quibus naturaliter esse non potest, nam juxta Te *monades revera non sunt hujus additi ingredientia sed requisita non quidem absoluta metaphysicaque necessitate sed sola exigentia* quod interpretor quasi dicerēs monadas isti addito *praerequiri* tanquam aliquid natura prius illo. Hanc interpretationem si non respuis (nec respuere posse videris nam quod unitatis principium in se non continet, illud *praesupponere* aliunde debet) iam planum est, additum illud non esse substantiam in sensu peripateticorum qui per substantiam aliud nihil intelligunt, quam ens primum, caeteris substratum et praesuppositum. Iam ergo habebimus in corporibus aliquid absolutum distinctum a monadibus quod non sit substantia. Atque ita corpus cum nihil monadibus superaddat nisi illud absolutum, solum accidens illis superaddet.

Porro absolutum illud nollem statuere in solis punctis accidentalibus ad

phenomena, and so extension will be only a phenomenon; or a certain unifying reality is superadded to monads that adds something absolute (and thus substantial), albeit impermanent, to the things (monads) to be unified. I admit this disjunction as regards the issue itself, but I take it that the former is not true, and therefore the latter is.

And indeed, if bodies were mere phenomena, the paradox of Zeno, the denier of all true and proper motion, would be true. For if no things touch each other, they will not be moved either. To deny this half of the disjunction, it seems to me enough to have the basic principles of all philosophers, along with the prejudices of the ignorant, who do not doubt that there is something more in body than phenomena, that is, something more than continuous dreams, however perfectly they may agree with each other. And this is so true that Malebranche, who denies that the existence of bodies can be demonstrated, does not himself seem to disavow body: for when he denies the former, he is not speaking of those phenomena that are as certain to us as anyone's perception is to them. On the contrary, he clearly declares that he does not doubt that there are those bodies that he contends cannot be demonstrated. "I believe it to be well proved," he says, "but badly demonstrated. I even believe it to be demonstrated, but supposing faith."² Do you think that he is speaking of phenomena alone here?

And so it remains for us to admit something absolute, in which the realization of the phenomena consists. You call this a substance, I, an accident; but I believe there will not be a dispute about this issue. I call an accident whatever presupposes a substance complete in itself, in such a way that it cannot exist without it, at least not naturally. But certainly that absolute unifying thing presupposes a complete substance or monads, without which it cannot naturally exist, for according to you "monads are not really ingredients of this added thing, but requisites, not indeed by an absolute and metaphysical necessity, but only by exigency,"³ which I interpret as if you were saying that monads are "prerequisites" for this added thing, as something prior by nature to it. If you do not reject this interpretation (and you do not seem able to reject it, for that which does not contain a principle of unity in itself, must "presuppose" it from somewhere else), then it is clear that that added thing is not a substance in the sense of the Peripatetics, who understand by substance nothing other than a first being, a substratum and presupposition for the remaining things. Therefore, we shall now have in bodies something absolute, distinct from monads, that is not a substance. And so body, since it superadds to the monads nothing except this absolute thing, will superadd only an accident to them.

Moreover, I should not wish to ground this absolute thing solely in the

monadas respondentibus, nam eadem videtur manere difficultas circa illa quae circa monadas ipsas quo pacto videlicet cum extensa non sint, facere extensum possint. Itaque prorsus necesse videtur ad unionale aliquod confugere, quod dici possit extensio accidentalis absoluta. De caetero si per phaenomena sola naturalis corporum constitutio explicari posset fateor nullum philosophicum fore fundamentum recurrendi ad accidentia non modalia in explicandis Eucharistiae accidentibus. Sed ut supra dixi communis hominum sensus in corpore sensibili aliquid amplius quam phaenomena in animae percipientis operatione consistentia intelligere videtur. Et naturaliter loquendo perceptioni illi debet aliquod objectum respondere distinctum ab ipsa perceptione. Alioqui Harmonia non esset.

Ubi Meldensis Episcopi mandatum perlegeris gratum erit mihi intelligere aliquando quid de illo sentias. Qui si Jansenium ejusque sequaces propositiones damnatas in sensu improbando docuisse ostendit suscepto munere defunctus est hoc enim intendebat unice. An vero Jansenio faveat Augustinus, alia quaestio est quam Episcopi duo Lucionensis et Rupellensis nuper prolixè satis expenderunt in Pastoralis sua instructione quae etiam penes me est. Titulos sectionum in quibus de voluntate Dei circa salutem omnium agit visum est hic apponere.

Chapitre cinquieme où l'on montre l'opposition de la doctrine de S. Augustin avec celle qui est contenue dans la cinquieme proposition condamnée par l'Eglise. 436. sect. 1, où l'on montre par des textes formels tirés de tous les ouvrages de S. Augustin que Jesus Christ est mort pour procurer le salut eternel d'autres que des predestinés. 437. sect. 2, où l'on fait voir que selon S. Aug. Jesus Christ est mort pour tous ceux qu'il doit juger. 448. sect 3, où l'on fait voir que selon S. Aug. Jesus C. est mort pour tous ceux qui sont morts par le peché originel. 454. sect. 4, où l'on montre que selon S. Aug. Jesus C. a prié pour le salut eternel de tous les hommes en general et chacun d'eux en particulier meme des plus insignes reprouvés. 467. sect. 5, où l'on fait voir que selon S. Augustin Jesus C. a tellement repandu son sang pour tous les hommes qu'il est au pouvoir d'un chacun d'en être effectivement racheté s'il veut. 471. sect. 6, où l'on fait voir que selon S. Aug. Dieu veut d'une volonté sincere et effective quoy que conditionnelle le salut de tous les hommes en general et de chacun d'eux in particulier. 480. sect. 7, où l'on montre par S. Aug. que Dieu

accidental points corresponding to monads, for it seems that the same difficulty remains with these things as with the monads themselves, namely, how they could produce something extended, when they are not extended. And so, in fact, it seems necessary to have recourse to some unifying thing, which can be called absolute accidental extension. Further, if the natural constitution of bodies could be explained by phenomena alone, I confess there would be no philosophical reason to resort to nonmodal accidents in explaining the accidents of the eucharist. But, as I said above, the common sense of men seems to understand something more in a sensible body than phenomena that consist in the operation of a perceiving soul. And, speaking naturally, there ought to be some object distinct from the perception itself that corresponds to the perception; otherwise there would be no harmony.

When you have read the decree of the bishop of Meaux,⁴ I shall be grateful to know at some point what you think of it. If he shows that Jansen and his followers taught the condemned propositions in the disapproved sense, he has fulfilled the duty he assumed, for it was this alone that he intended to do. Whether Augustine in fact would be well disposed toward Jansen is another question, which the bishops of Luçon and La Rochelle considered recently at some length in their pastoral instruction, which is also in my possession.⁵ It seemed right to list here the titles of the sections in which they discuss the will of God concerning the salvation of all.

Chapter 5, in which the opposition of St. Augustine's teaching to that which is contained in the fifth proposition condemned by the Church is shown.⁶ Page 436, section 1, in which it is shown by explicit texts taken from all the works of St. Augustine that Jesus Christ died in order to obtain the eternal salvation of those other than the ones predestined [for salvation]. Page 437, section 2, in which it is made clear that, according to St. Augustine, Jesus Christ died for all those whom he must judge. Page 448, section 3, in which it is made clear that, according to St. Augustine, Jesus Christ died for all those who died through original sin. Page 454, section 4, in which it is shown that, according to St. Augustine, Jesus Christ prayed for the eternal salvation of all men in general and each of them in particular, even the most damned. Page 467, section 5, in which it is made clear that, according to St. Augustine, Jesus Christ shed his blood for all men to such an extent that it is within the power of each to be in fact redeemed if he wants. Page 471, section 6, in which it is shown that, according to St. Augustine, God wills with a sincere and effective, though conditional, will the salvation of all men in general and of each one in particular. Page 480, section 7, in which it is shown by St. Augustine that God gives sufficient

donne des secours suffisans de grace interieure et actuelle pour rendre le salut possible à tous les hommes qui sont en etat d'en profiter par leur libre arbitre. 487. sect. 8, où l'on explique par S. Augustin meme les Endroits où ce pere semble restreindre la volonté que Dieu a du salut des hommes au salut des seuls predestinés. 499. sect. 9, on explique les textes où S. Aug. semble restreindre la priere de J. C. pour le salut eternel des seuls predestinés. 508. sect. 10, on explique les textes où S. Augustin semble dire que Dieu ne veut en aucune maniere le salut des enfans qui meurent sans bapteme. 519. sectionem 8am in qua explicantur textus in quibus S. Aug. videtur innuere quod Deus non velit salutem singulorum in adiecta scheda reperiens.

Idem argumentum recenter tractavit quidam Ordinis Eremitarum Sancti Augustini Licentiatus Lovaniensis libro cui titulus Augustinus Europaeus Africano contrarius. Hic Coloniae venalis prostat.

Theodicaeae versionem ad paginam usque 540 promovi ubi absoluta fuerit quoad tentamina (quod intra quindecim dies fore confido) describere aggrediar, et descriptionem ad Te mittam. Per singulas saltem dissertationes sive partes subsequenter notae quibus manum non adjiciam nisi finita versione. Tum paulatim cogitandum erit de editione, quae tamen vix ante nundinas autumnales Francofurtenses speranda est.

Hartsoeckerus noster altum silet. Tuas ad illum litteras misi Lutetiam. Mitto quaedam Sinensia. Nescio ubi legerim habere Te meditationes quasdam philosophicas paratas, quibus naturae principia elucides. Scire aveo num spes sit eas brevi editum iri. Vale vir illustrissime. Dabam Paderbornae 20 Maji 1712.

Illustrissime Dominationi Tuae
Devotissimus cliens
Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

R^{me} Pater Fautor Honoratissime

Si id quod monadibus superadditur ad faciendam Unionem substantiale esse negas, jam corpus substantia dici non potest; ita enim merum erit Monadum aggregatum, et vereor ne in mera corporum phaenomena recidas. Monades enim per se ne situm quidem inter se habent, nempe realem,

aid of interior and actual grace to render salvation possible to all men who are in a state to profit from their free will. Page 487, section 8, in which the passages in which the father seems to restrict the will that God has for the salvation of men to the salvation of the predestined alone are explained by St. Augustine himself. Page 499, section 9, the texts are explained in which St. Augustine seems to restrict the prayer of Jesus Christ to the eternal salvation of the predestined alone. Page 508, section 10, the texts are explained in which St. Augustine seems to say that God does not in any way will the salvation of infants who die without baptism. Page 519, section 8, in which the texts are explained in which St. Augustine seems to intimate that God does not will the salvation of individuals. All of this you will find on the enclosed sheet.

A certain graduate⁷ of the Order of Hermits of St. Augustine in Louvain recently employed the same argument in a book titled *The European Augustine against the African*. This is for sale in Cologne.

I have worked all the way to page 540 in the translation of the *Theodicy*.⁸ When it is finished, as far as the main essay is concerned (which I trust will be within two weeks), I shall set about transcribing it, and I shall send the copy to you. Notes to at least the individual dissertations or parts will come later, but I shall not turn to them until the translation is finished. Eventually some thought will have to be given to publication, but we can scarcely hope for that before the fall book fair in Frankfurt.

Our Hartsoecker keeps a deep silence. I sent your letter to him in Paris.⁹ I am sending something on China. I do not know when I shall read that you have some philosophical meditations ready in which you elucidate the principles of nature. I am eager to know whether there is hope that these will be published soon. Farewell, most distinguished Sir. From Paderborn, 20 May 1712.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, S.J.

50. Leibniz to Des Bosses¹

[Hanover, 26 May 1712]

Most Reverend Father, Most Honored Supporter,

If you deny that what is superadded to monads in order to make a union is substantial, then a body cannot be said to be a substance, for in that case it will be a mere aggregate of monads, and I fear that you will fall back on the mere phenomena of bodies. For monads in themselves do not even have situation with respect to each other—at least one that is real, which

qui ultra phaenomenorum ordinem porrigatur. Unaquaeque est velut separatus quidam Mundus, et hi per phaenomena sua consentiunt inter se, nullo alio per se commercio nexuque. Si *accidens* vocas, quicquid substantiam completam ita supponit, ut naturaliter sine ipsa esse nequeat, non explicas in quo consistit id quod accidenti est essenziale, et quo etiam in statu supernaturali a substantia distingui debet. Peripatetici omnino aliquid substantiale agnoscunt praeter Monades, alioqui secundum ipsos nullae substantiae praeter Monades forent. Et monades non constituunt substantiam completam compositam, cum non faciant unum per se, sed merum aggregatum nisi aliquod substantiale vinculum accedat.

Ex Harmonia non potest probari, aliquid aliud esse in corporibus quam phaenomena. Nam aliunde constat harmoniam phaenomenorum in animabus non oriri ex influxu corporum, sed esse praestabilitam. Idque sufficeret si solae essent animae vel Monades; quo casu etiam omnis evanesceret Extensio realis, nedum Motus, cujus realitas ad meras phaenomenorum mutationes redigeretur.

Vellem aliquis integrum systema Jansenii in compendio exhiberet, alioqui difficile est in re tam perplexa de mente ejus recte judicare. Et quemadmodum ex Augustino plane contraria videntur exsculpi posse, verbis ejus e sua sede dimotis; ita fieri potest, ut idem Jansenio eveniat. Sed nexus meditationum tollere hanc dubitationem potest. Et valde versatum esse oportet in lectione Augustini, et librorum ejus diversorum nosse tempora, scopos, synopsis; qui locis ex eo excerptis decipi non vult. Id olim nonnullis ejus verbis curiosius inspectis animadvertere mihi visus sum; eoque nunc sum factus circumspectior.

Hartsoekerus promisit se ultra de Atomis non replicaturum: in eo proposito constantem se ostendere vult.

Multas utique habeo Meditationes Philosophicas, sed nondum editioni paratas. Ex iis eae quae pertinent ad Leges motus, maxime ad elucidanda naturae principia inservire possunt.

Multum Tibi debeo, quod tanto studio in libello meo vertendo versaris. Vellem invenisses in eo quae operae pretium facere possent.

Gratias ago pro communicatis quae ad res Sinenses pertinent; quanto magis eas considero, eo magis miror Romae fieri, quae mihi periculum missionis augere videntur. Et recta monent Lusitani, quorum interest non irritari Monarcham Sinensem. Interea vereor ut papa probeat, quod Lusi-

extends beyond the order of phenomena. Each is, as it were, a certain world apart, and they harmonize with each other through their phenomena, and not through any other intrinsic intercourse and connection. If you call whatever presupposes a complete substance in such a way that it cannot naturally exist without it an "accident," then you do not explain what it is that is essential to an accident, and how it ought to be distinguished from a substance even in a supernatural state. The Peripatetics certainly recognize something substantial besides monads; otherwise, according to them, there would be no substances besides monads. And monads do not constitute a complete composite substance, since they do not make a *per se* unity, but a mere aggregate, unless some substantial bond is added.

It cannot be proved from harmony that there is anything else in bodies besides phenomena. For it is established on other grounds that the harmony of phenomena in souls does not arise from an influx of bodies, but is preestablished. And this would suffice if there were only souls or monads; in which case all real extension would also vanish, not to mention motion, whose reality would be reduced to mere changes of phenomena.

I wish that someone would present Jansen's whole system in a compendium; otherwise it is difficult to judge his view correctly in such a complex matter. And just as it seems clear that contrary statements can be carved out of Augustine by separating his words from their context, so it is possible that the same thing happens to Jansen. But the connection among his thoughts can remove this uncertainty. And one must be very well versed in the reading of Augustine, and know the dates, scope, and outline of his different books, if one does not wish to be deceived by excerpts taken from him. This occurred to me a while back after looking at some of his statements more carefully, and so I have now been made more circumspect.

Hartsoeker promised that he would no longer respond on the question of atoms; he wants to show that he is firm in this resolution.²

I indeed have many philosophical meditations, but they are not yet ready for publication. Of these, those that pertain to the laws of motion can best serve to elucidate the principles of nature.³

I owe you a great deal for translating my book with such zeal. I hope that you have discovered something in it that could repay your efforts.

Thank you for the communications regarding Chinese affairs; the more I consider these things, the more I wonder at the things done in Rome, which seem to me to increase the danger of the mission. And the Portuguese, for whom it is important not to irritate the Chinese emperor, are correct in their warning. In the meantime, I fear that the pope will not ap-

tani sibi jus patronatus in Ecclesias Sinenses attribuunt.

Nosse velim an R. P. Turneminus promissam Theodicaeae meae recensionem Trivultianis suis Actis literariis inseruerit.

Libros in scheda hac notatos Dominus Romerskirchen quando volet mittere poterit. Pretium ascripsi quale ipsemet statuit. Solvam pecuniam et pro his et pro priore, illi quem mihi nominabis. Interea vale et fave. Dabam Hanoverae 26 Maji 1712.

Deditissimus

G. G. Leibniz

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Gratissimas Tuas litteras ante biduum accepi, quibus ut statim reponam facit allatus de Ptolemaeo nostro Cardinale creato nuntius quem utique jam ex novellis publicis intellexeris quia tamen virum amas, circumstantias nonnullas nobis ab alumno quodam Collegii Germanici perscriptas non invitus credo leges in adjecta Scheda. Si gratulari volueris, mitte sis ad me litteras Tuas quibus addam ego meas.

Aggredior nunc Epistolae Tuae capita philosophica. *Si id quod Monadibus superadditur, inquis, ad faciendam unionem, substantiale esse negas, jam corpus substantia dici non potest, ita enim merum erit Monadum aggregatum.* Respondeo duplex a Peripateticis statui corpus. Alterum quod in praedicamento substantiae ponitur, et hoc substantia est modo a me paulo post explicando. Alterum mathematicum et hoc in quantitate dimensionis consistit quam accidens esse merum fateor. De hoc in postremis meis agebam duntaxat. Fateor enim corpus priori modo acceptum merum monadum aggregatum fore si nulla inter monadas daretur substantialis unitas. Hanc porro unitatem sic concipio et explico phrasibus peripateticis quibus Systema Tuum ad usum Scholae aptare conabor utcumque.

Formae adeoque monades ipsae (rationalem animam excipio) quoad essentiam sive quoad actum metaphysicum semper sunt, non item quoad existentiam sive quoad actum physicum ad eum fere modum quo apud Peri-

prove of the Portuguese attributing patronage rights to themselves in the Chinese church.⁴

I should like to know whether the Reverend Father Tournemine has inserted the promised review of my *Theodicy* in his *Mémoires de Trévoux*.

Mr. Rommerskirchen can send me the books noted on this sheet when he wants.⁵ I entered the price that he himself set. I shall send the money both for these books and for the preceding ones to whomever you name. In the meantime, farewell and think kindly of me. From Hanover, 26 May 1712.

Most faithfully,
G. W. Leibniz

51. Des Bosses to Leibniz¹

[Paderborn, 12 June 1712]

Most Distinguished Sir, Most Esteemed Patron,

Two days ago I received your most welcome letter. The announcement, which you certainly will have already heard from published reports, that our Tolomei has been made a cardinal, makes me respond right away.² Since you love the man, I believe you will be happy to read about some of the circumstances, as described to us by an alumnus of the German College, on the enclosed sheet. If you would like to congratulate him, send me your letter, if you will, and I shall add my own to it.

I come now to the philosophical parts of your letter. You say: "If you deny that what is superadded to monads in order to make a union is substantial, then a body cannot be said to be a substance, for in that case it will be a mere aggregate of monads."³ I respond that the Peripatetics established a twofold notion of body: one that is placed in the category of substance, and this is a substance in a sense I shall explain a little later; the other is mathematical, and this consists in dimensional quantity, which I grant is merely an accident.⁴ It was only with this feature that I was concerned in my last letter. For I admit that body, taken in the first sense, would be a mere aggregate of monads if there were no substantial unity among the monads. Furthermore, I conceive of this unity in the following way, and I explain it in the language of the Peripatetics, by means of which I shall try to adapt your system wherever possible for the use of the schools.

According to many Peripatetics, with respect to their essence or metaphysical actuality, but not with respect to their existence or physical actuality, forms, and therefore monads themselves (I set aside the rational

pateticos complures, partes dicuntur esse in toto potentia duntaxat, aut sicut Averroes et Zabarella putant elementa manere in mixto, refracta scilicet. In animali V.G. equo existentiam sive actum physicum sola habet forma dominans nempe anima equi. Cum ens et unum convertantur per illud ipsum res fiet una per quod fiet existens. Atque ita cum animal totum sit existens per existentiam ab anima emanantem, corpus animalis constituetur unum per istam existentiam. Porro haec existentia modus quidam est substantialis ab anima sive forma totali ac dominante emanans atque caeteras partiales monadas afficiens et sibi subordinans vi cuius fit ut ex his monadibus subordinatis et illa dominante existat una substantia corporea quae equus dicitur.

Ex jam positis fit monadas quoad essentiam suam spectatas praescindendo ab existentia omni sive actu physico esse quidem substantias et entia prima metaphysice completa, quia actum metaphysicum habent, nempe entelechiam, non tamen esse completas in ratione substantiae physicae nisi quatenus et quando entelechia dominans existentiam atque adeo unitatem tribuit toti massae organicae V.G. corpori equino ita ut haec ipsa nulli alteri entelechiae subordinata sit.

Haec porro existentia sive unitas ac vinculum substantiale, fateor, per se ne situm quidem realem tribuit monadibus inter se, posset enim existentia sive unitas illa haberi quamvis omnes corporis equini monades in unum punctum confluxissent. Appono verba Perezii nostri de Incarnatione disputatione 1 cap. 4 n. 29 pag. 323. Duae sunt uniones continuativae alia accidentalis et pendens a quantitate accidentali, et haec potest habere illum ordinem ratione cuius assignato certo puncto partes illud respiciunt propinquius vel remotius proportionaliter ad certum situm et figuram externam. Haec unio potest esse violenta, ut in monstris. Alia est substantialis, et in hac nullus est ordo formaliter reddens partes dispariter se habentes, sed similiter continuat singulas partes singulis, quare monstruosa continuatio nullo modo includitur in illa unione et modo integritatis substantialis, et hoc est quod multi Autores dicunt in substantia materiali antedecenter ad quantitatem accidentalem, nullam dari partium distinctionem sed illam provenire a quantitate. Non est id accipiendum de distinctione opposita simplicitati et identitati sed de distinctione ordinata afficiente dissimiliter partes et cum certo ordine respectu unius puncti.

soul), always exist more or less in the way that parts are said to be in a whole only potentially, or, as Averroës and Zabarella think, that elements remain in a compound, namely, as “refracted things.”⁵ In an animal, for example a horse, only the dominant form, that is, the soul of the horse, has existence or physical actuality. Since being and unity are convertible, a thing is made one by the same thing that brings about its existence. And thus, since the whole animal is existent by virtue of the existence emanating from the soul, the body of the animal is made into one thing by this existence. Moreover, this existence is a certain substantial mode emanating from the soul, or the total and dominant form, and affecting the remaining partial monads and subordinating them to itself; and in virtue of this it happens that from these subordinating monads and this dominant monad there exists one corporeal substance, which is called a horse.⁶

Given this it follows that monads, considered with respect to their essence by abstracting from all existence or physical actuality, are indeed substances and metaphysically complete primary beings, since they have metaphysical actuality, that is, an entelechy; but they are not complete in the manner of a physical substance, except insofar as and when a dominant entelechy bestows existence and therefore unity on the whole organic mass, for example on the body of the horse, so that this mass itself is subordinate to no other entelechy.

Moreover, I admit that this existence or unity and substantial bond by itself does not even bestow real situation on the monads among themselves, for this existence or unity could be had even if all the monads of the horse’s body met in one point. I append the words of our Perez on the incarnation (disputation 1, chapter 4, section 29, page 323):⁷ “There are two kinds of continuous union. The one is accidental and depends upon accidental quantity, and this can have that order by virtue of which, being assigned to a certain point, parts are considered relatively nearer or farther away with respect to a certain place and external figure. This union can be imposed, as in miracles. The other union is substantial, and in it there is no order formally rendering those things that are separate from each other parts, but it does similarly make individual parts continuous with individual parts. Therefore, a miraculous continuity is in no way included in this union or in this kind of substantial whole. And this is why many authors say that prior to accidental quantity there is no distinction of parts in material substance, but that this comes about from quantity. It is not necessary to accept this in connection with the opposing distinction of simplicity and identity, but only in connection with the distinction of order that affects parts in different ways and with a definite order relative to one point.

Atque hinc obiter constat, fixuram clavorum perseverantem in manibus Christi nullam facere rupturam substantialem et substantiam eodem modo manere substantialiter continuatam in Christo atque si nulla esset ruptura itaque illa ruptio manuum Christi solum est accidentalis, et idem dicendum est in similibus. Hucusque Perez.

Assentior itaque dum dicis: *Peripatetici omnino aliquid substantiale* (modale non absolutum, physicum non metaphysicum) *agnoscunt praeter monadas, alioqui secundum ipsos nullae substantiae* (physicae) *praeter monadas forent. Et Monades non constituunt substantiam completam compositam* (physicam) *cum non faciant unum per se* (physicum) *sed merum aggregatum nisi aliquod substantiale vinculum accedat.* His inquam omnibus assentior ad quorum veritatem sufficit quod substantia physica metaphysicis sive monadibus superaddat modum aliquem substantialem qualem supra dixi.

Ais: *Si accidens vocas, quidquid substantiam completam ita supponit ut naturaliter sine ipsa esse nequeat, non explicas in quo consistat id quod accidenti est essenziale, et quo etiam in statu supernaturali a substantia distingui debet.* Respondeo accidenti essenziale esse quod exigit inesse substantiae, cum pars substantiae non sit, sed illi prorsus completae tam in esse metaphysico quam physico, hoc est tam quoad essentiam quam existentiam constitutae adveniat eaque connaturaliter saltem indigeat. Haec exigentia in accidente permanet etiam in statu supernaturali et per illam exigentiam distinguitur ab omni substantia. Videri potest S. Th. 3. parte qu. 77 artic. 1. ad 2. Hanc accidentis notionem peripateticam imo Aristotelicam esse ostendit Martinus Smigletius subtilis peripateticus Logicae suae disputatione 8. quaestione prima per totam, pagina mihi 543. editionis Ingolstadiensis.

Ex Harmonia, inquis, non potest probari aliud esse in corporibus quam phaenomena, nam aliunde constat Harmoniam phaenomenorum in animabus non oriri ex influxu corporum sed esse praestabilitam, idque sufficeret si solae essent animae vel monades, quo casu etiam omnis evanesceret extensio realis, nedum motus cuius realitas ad meras phaenomenorum mutationes redigeretur.

Quamvis Harmonia praestabilita sit, hoc ipso tamen quod harmonia est, exigit perceptionibus quae in anima sunt respondere ea quae extra animam geruntur alioqui dicam ad veritatem perceptionum sive cognitionum

Hence, incidentally, it is proved that the persistent driving of nails into the hands of Christ causes no substantial damage, and substance remains in the same way substantially continuous in Christ as if there were no damage, and so this damage to the hands of Christ is solely accidental; and the same thing is to be said in similar cases.” So much for Perez.

And so I agree when you say: “Peripatetics certainly recognize something substantial (modal not absolute, physical not metaphysical) besides monads; otherwise, according to them, there would be no (physical) substances besides monads. And monads do not constitute a complete composite (physical) substance, since they do not make a (physical) per se unity, but a mere aggregate, unless some substantial bond is added.”⁸ I say I agree to all of this; it is sufficient for its truth that physical substance superadds some substantial mode to metaphysical substances or monads, as I said above.

You say: “If you call whatever presupposes a complete substance in such a way that it cannot naturally exist without it an ‘accident,’ then you do not explain what it is that is essential to an accident, and how it ought to be distinguished from a substance even in a supernatural state.”⁹ I reply that it is essential to an accident that it demands to be in a substance; though it is not a part of substance, it is certainly in this complete thing in both a metaphysical and a physical sense. That is, it is present in the constituted thing with respect to both essence and existence, and needs it at least connaturally.¹⁰ This exigency remains in the accident even in a supernatural state, and it is distinguished from all substance by this exigency. It can be seen in St. Thomas, Part III, question 77, article 1, reply to objection 2.¹¹ Martin Smiglecius, the subtle Peripatetic, shows that this Peripatetic notion of accident is indeed Aristotelian, in his *Logic*, disputation 8, throughout the first question on page 543 in my copy of the Ingolstadt edition.¹²

You say: “It cannot be proved from harmony that there is anything else in bodies besides phenomena. For it is established on other grounds that the harmony of the phenomena in souls does not arise from an influx of bodies, but is preestablished. And this would suffice if there were only souls or monads; in which case all real extension would also vanish, not to mention motion, whose reality would be reduced to mere changes of phenomena.”¹³

Although the harmony is preestablished, still, the very fact that there is harmony demands that there are things that happen outside the soul that correspond to the perceptions in the soul; otherwise I should say that it is enough for the truth of my perceptions or thoughts that my soul alone ex-

mearum sufficere ut anima mea sola existat una cum perceptionibus suis. Nam cognitiones meae verificabuntur per phaenomena quae intra animam sunt. Praeter seriem ordinatam perceptionum in anima existentium requiritur ad veritatem propositionis, qua V.G. affirmo Socratem sedere, respectus aliquis ad objectum distinctum ab ipsis perceptionibus, qui respectus sine objecto ipso esse non potest. Ab eo enim quod res est, dicitur propositio vera vel falsa. Aut quid deerat veritati iudicii illius qui apud Horatium existimabat se *miros audire tragoedos* ac scite concinnatos? Censesne cognitiones quas nunc habemus veras fore si totius mundi monades in unum veluti punctum compactae forent aut in vacuo secretae ab invicem degerent. Id si ita sit, quid opus materia inerti quae motum retardet, quid opus entelechia quae motus sit principium, aut quo pacto una monas alterius actionem impediet? Alii philosophi Recentiores duce Cartesio per solum motum localem omnes alias affectiones explicari posse voluerunt nunc contra motus ipse localis per alias affectiones explicandus veniet. Denique aut perceptiones sive cognitiones nostras per mera phaenomena non verificari dicendum est, aut cum antiquis illis dicendum erit omnia esse vera quae apparent: solem E. G. esse sesquipedalem. Ut taceam hac explicandi corpora ratione physices et matheseos concretae objecta tolli videri.

Atque ex his dubitationibus meis vides, vir Illustrissime necdum satis a me percipi sententiam Tuam nec ea quae dicis in notis ad librum de Origine Mali n. 5. incommodare arbitror realitati corporis mathematici sive quantitatis dimensivae ultra phaenomena progressae. Sed tamen uti nuper dixi si verum esset id totum per phaenomena sola explicari posse, hoc opinor non obstaret dogmati de transsubstantiatione. At cum multos semper fore philosophos arbitrer qui in corpore sic sumpto aliquid esse praeter phaenomena iudicabunt, satis mihi erit si in hac saltem via quantitatem dimensionem absolutum aliquid esse a substantia distinctum concedatur.

Cum S. Augustinus (uti et Scriptura ipsa) plane contraria loqui subinde videatur, quae non revocavit etiam dum libros suos jam senior retractavit, nunquid hoc satis est fundamenti ad distinguendos duos verborum illorum sensus? *Deus vult voluntate conditionata salutem omnium hominum.* Hoc vult Augustinus in textibus nuper a me allatis. *Deus non vult voluntate absoluta et decretoria salutem omnium sumptorum pro singulis generum sed*

ists together with its perceptions. For my thoughts will be verified by phenomena that are within the soul. The truth of a proposition in which, for example, I affirm that Socrates is sitting, requires, besides the ordered series of perceptions existing in the soul, some reference to an object distinct from the perceptions themselves, a reference that cannot exist without the object itself. For by virtue of this fact, a proposition is said to be true or false. Otherwise, what was missing in the truth of the judgment of the man, in Horace, who thought that he “heard the wonderful tragic actors” and the knowing chorus?¹⁴ Do you think that the thoughts that we now have would be true if the monads of the whole world were compressed as it were into one point or if they were to exist in a vacuum separated from one another? If this is so, what need is there for inert matter that retards motion? What need is there for an entelechy that is the principle of motion, or how does one monad impede the motion of another? Other modern philosophers, following the lead of Descartes, have wanted all other affections to be explicable by local motion alone; now, on the contrary, local motion itself comes to be explained by other affections. In sum, either it must be said that our perceptions or thoughts are not made true by mere phenomena, or, with the ancients, it will have to be said that everything that appears is true: for example, that the sun is a foot and a half tall. Not to mention the fact that, on this way of explaining bodies, concrete physical and mathematical objects seem to be eliminated.

And you see from these doubts of mine, most distinguished Sir, that I have not yet sufficiently understood your view, and I believe that the things you say in the remarks on the book *The Origin of Evil* (section 5) are detrimental to the reality of mathematical body or dimensional quantity that goes beyond the phenomena.¹⁵ But still, as I recently said,¹⁶ if it were true that everything could be explained through phenomena alone, I believe that this would not stand in the way of the dogma of transubstantiation. But since I believe that there will always be many philosophers who will judge that there is something in body so construed beyond phenomena, it will be enough for me if in this way at least it is conceded that dimensional quantity is something absolute distinct from substance.

Although St. Augustine seems to say things now and then that are clearly opposed (as indeed does scripture itself), things that he did not retract even when he revised his books as an old man, is this sufficient reason to distinguish two senses of those words? “God wills with a conditional will the salvation of all men.” Augustine asserts this in the texts that I recently reported on.¹⁷ “God does not will with an absolute and decisive will the salvation of all individuals of different kinds but of kinds of indi-

pro generibus singulorum. Id contendit in textibus qui pro negativa afferuntur, uti etiam contendit S. Prosper in *Articulis Augustino falso impositis.* Janseniani dum nullam in Deo salutis reproborum voluntatem admitti ab Augustino volunt, eum sibi ipsi aperte contradicentem faciunt. Et si scopus libri in quo S. Pauli verba de generibus singulorum exponit, consideretur, de voluntate decretoria locutus fuisse reperietur. Jansenii sensus dubius amplius esse posse non videtur cum uti demonstrat Meldensis Episcopus, non alium ei sensum tribuat ecclesia, quam quo Sectatores eum sui intellexere.

Opportune accidit, ut hoc ipso tempore quo Theodicaeam verto, Tractatum de Deo prae manibus habeam nam dum autores nostros hoc de argumento evolvo, plurima occurrerunt quae cum meditationibus Tuis egregie conspirant. Speciminis loco sit excerptum ex Izquierdo, quo sententia Tua de necessitate morali Dei ad optimum plane exprimitur, atqui jurare paene ausim opus illud nunquam a Te visum. Operosum esset omnia perscribere quae tuis consentientia habet. Objectionibus quae contra sententiam utrique communem militant, et quarum non paucae mihi occurrebant scite respondet. Excerptum illud pagina hujus folii extrema reperies. Hujusmodi excerpta, si probas, non pauca subjungere potero versioni Theodicaeae, quam quo magis volvo eo amplius placet si paucula quaedam excepero quae nihil ad summam faciunt. Reperi tandem locum in quo spem facis aliquando videndi a TE quaedam de Continuitate et Indivisibilibus ac Infinito. Extat is in praefatione Theodicaeae quam necdum verti. Dignus profecto te vindice nodus quem nisi solveris, nemo arbitror unquam solvet. Itaque hanc de Philosophia bene merendi occasionem ne quaeso negligas.

Cras ad Dnum Rommerskirchium mittam schedam Tuam. Vale illustrissime Domine, et prolixae epistolae meae ignosce. Dabam Paderbornae 12 Junii 1712.

Illustrissimae Dominationi Tuae

Devotissimus cliens

Bartholomaeus Des Bosses SJ

Dum litteras Tuas relego, unum invenio cui non respondi. Turnaminus indicavit mihi Theodicaeam in Actis Trivultianis esse recensitam Teque judicio de ea lato fore contentum. Quin et Diarii exemplum ad me miserat sed illud in via periit. Itaque novum poposci ubi accepero, tecum communicabo. Iterum vale.

viduals.” He insists on this in the texts advanced on behalf of the contrary view, as does St. Prosper also in his *Articles against the False Augustine*.¹⁸ When the Jansenists claim that Augustine does not allow any will in God for the salvation of the damned, they make him openly contradict himself. And if one considers the point of the book in which he explains St. Paul’s statements about kinds of individuals, one finds that he spoke of a decisive will.¹⁹ It seems that Jansen’s opinion could not be more doubtful, since, as the bishop of Meaux²⁰ demonstrates, the Church does not attribute a different meaning to him from that which his followers understood him to have.

Fortunately it turns out that at the very moment that I am translating your *Theodicy*, I have the *Treatise on God* at my fingertips, for while I was studying our authors on this subject, many things suggested themselves that agree exceptionally well with your meditations. As an indication of this, consider an excerpt from Izquierdo, in which your opinion concerning the moral necessity of God for the best is clearly expressed, and I would almost dare to swear that this work was never seen by you. Writing out everything that agrees with your views would be difficult. He responds cleverly to the objections that work against the view common to you both, not a few of which occurred to me. You will find this excerpt on the last page of this folio.²¹ If you approve, I could append many such excerpts to the translation of the *Theodicy*, though the more I think about it, the more I find it preferable that I should omit a few of these, which on the whole add nothing. I finally found the place in which you raise the hope of sometime seeing something by you on continuity, and on indivisibles and the infinite. It appears in the preface to the *Theodicy*, which I have not yet translated.²² This is a problem truly worthy of being conquered by you, which, unless you solve it, I believe no one ever will. Thus, I beg you not to neglect this opportunity to serve philosophy well.

Tomorrow I shall send your order sheet to Mr. Rommerskirchen. Farewell, most distinguished Sir, and forgive the length of my letter. From Paderborn, 12 June 1712.

Your Excellency’s most devoted servant,
Bartholomew Des Bosses, S.J.

P.S. Rereading your letter, I find one thing to which I have not responded. Tournemine indicated to me that the *Theodicy* was reviewed in the *Mémoires de Trévoux* and that you will be content with the extensive examination of it.²³ Indeed, he had even sent me a copy of the journal, but it was lost on the way. So I requested a new copy; when I receive it, I shall send it to you. Farewell again.

Leibniz to Des Bosses

R^{me} Pater, Fautor Honoratissime

Nova semper beneficia in me cumulas, in quibus non postrema sunt, quod Recensionem Trivultianam procurasti, quam legere aveo, et quod non nunciasti tantum, sed et narratione condigna illustrasti Eminentissimi Ptolemaei promotionem; cui ex animo gratulor literis quas transmitto, et ut eas quemadmodum obtulisti, curare velis peto. Beneficium etiam tribuis, dum doctorum ex sacra schola virorum sententias meis qualibuscunque conspirantes notas. Id enim tum ad confirmandum, tum ad intelligendum plurimum valet. R. P. Sebastiani Izquierdo nihil aliud me in-spicere memini quam librum inscriptum *Pharus Scientiarum* quem juvenis vidi, sed ideam ejus paene amisi; quaedam phrases Izquierdinae in locis a Te excerptis nonnihil a meis dissonant, sed in re consentire videmur. Ex. gr. cum ait Deum necessitatum fuisse moraliter non physice ad mundum creandum, ego dicere malui, moraliter, non metaphysice; physicam enim necessitatem in libello meo sic explicui, ut sit consequens moralis.

Explicationem phaenomenorum omnium per solas Monadum perceptiones inter se conspirantes, seposita substantia corporea utilem censeo ad fundamentalem rerum inspectionem. Et hoc exponendi modo spatium fit ordo coexistentium phaenomenorum ut tempus successivorum; nec ulla est monadum propinquitas aut distantia spatialis vel absoluta dicereque esse in puncto conglobatas aut in spatio disseminatas, est quibusdam fictionibus animi nostri uti; dum imaginari libenter vellemus, quae tantum intelligi possunt. In hac etiam consideratione nulla occurrit extensio aut compositio continui, et omnes de punctis difficultates evanescent. Atque hoc est quod dicere volui alicubi in mea Theodicaea, difficultates de compositione continui admonere nos debere, res longe aliter esse concipiendas. Videndum deinde quid necesse sit superaddi, si addamus Unionem substantialem, seu ponamus substantiam dari corpoream adeoque materiam; et an tunc necesse sit recurri ad corpus Mathematicum. Certe Monades non ideo proprie erunt in loco absoluto, cum revera non sint ingredientia sed tantum requisita materiae. Itaque non ideo necesse erit indivisibilia quaedam localia constitui, quae in tantas difficultates conjiciunt. Sufficit substantiam corpoream esse quiddam phaenomena extra Animas realizans; sed in quo nolim concipere partes actu; nisi quae actuali divisione fiunt, nec indivisibilia nisi ut extrema.

52. Leibniz to Des Bosses¹

[Hanover, 16 June 1712]

Most Reverend Father, Most Honored Supporter,

You always overwhelm me with new kindnesses, not the least of which are that you have arranged to get me the *Mémoires de Trévoux*, which I am eager to read, and that you have not only announced but also given a worthy account of the promotion of the most eminent Tolomei, whom I heartily congratulate in the enclosed letter. I beg that you see he gets it, as you have offered to do.² You do me another kindness when you note the opinions of learned theologians that agree with any of mine. This is of the greatest value, both for confirming and for understanding them. I do not recall having seen anything by the Reverend Father Sebastian Izquierdo, except a book entitled *The Beacon of the Sciences*,³ which I looked at as a youth but whose contents I have mostly forgotten; certain expressions of Izquierdo in the passages you excerpt diverge somewhat from my own, but we seem to agree on essentials. For example, when he says that God was morally but not physically necessitated to create the world, I should prefer to say, morally but not metaphysically; for in my little book I have explained physical necessity as a consequence of moral necessity.⁴

I regard the explanation of all phenomena solely through the perceptions of monads agreeing among themselves, with corporeal substance excluded, to be useful for a fundamental investigation of things. In this way of explaining things, space becomes the order of coexisting phenomena, as time is the order of successive phenomena, and there is no absolute or spatial nearness or distance between monads. To say that they are crowded together in a point or disseminated in space is to employ certain fictions of our mind when we willingly seek to imagine things that can only be understood. No extension or composition of the continuum is involved in this account either, and all the problems about points disappear. As I tried to say somewhere in my *Theodicy*, the difficulties concerning the composition of the continuum should warn us that we need to conceive of things very differently.⁵ Next, we must consider what would have to be super-added, if we were to add a substantial union, that is, suppose that there is corporeal substance, and thus matter; and whether it is then necessary to revert to a mathematical body. Certainly monads will not for that reason properly be in an absolute place, since they are not actually ingredients but only requisites of matter. Thus, it will not be necessary for that reason to establish the kind of indivisible localities that throw us into such difficulties. It is enough that corporeal substance is something realizing phenomena outside of souls; but I should not want to conceive of actual parts in it, except those that arise from an actual division, nor of indivisibles, except as end points.

Monades puto existentiam semper habere plenam, nec concipi posse, ut partes potentia dicuntur esse in toto. Nec video quid Monas dominans aliarum monadum existentiae detrahat; cum revera inter eas nullum sit commercium, sed tantum consensus. Unitas substantiae corporeae in equo non oritur ab ulla refractione Monadum, sed a vinculo substantiali superaddito, per quod in ipsis monadibus nihil prorsus immutatur. Vermis aliquis potest esse pars corporis mei, et sub mea anima tanquam monade dominante, qui idem alia animalcula in suo corpore habere potest, sub sua monade dominante. Dominatio autem et subordinatio monadum in ipsis considerata monadibus non consistit nisi in gradibus perceptionum.

Si definiatur *accidens* id esse quod exigit inexistere substantiae vereor ut formalem rationem ejus satis explicemus, unde ratio apparere deberet, cur exigit. Sane etiam substantia saepe exigit aliam substantiam. Explicandum foret, quid proprie sit illud $\tau\omicron$ inesse in quo accidentis natura collocari solet. Ego ad hoc retulero ut sit modificatio absoluti alieni.

Verum est consentire debere, quae fiunt in anima cum iis quae extra animam geruntur. Sed ad hoc sufficit ut quae geruntur in una anima respondeant tum inter se, tum iis quae geruntur in quavis alia anima, nec opus est poni aliquid extra omnes Animas vel Monades. Et in hac hypothesis cum dicimus Socratem sedere, nihil aliud significatur quam nobis aliisque ad quos pertinet, haec apparere, quibus Socratem sessumque intelligimus.

Quia judicas Transsubstantiationis doctrinam cum Hypothesi vel fictione corporum ad phaenomena redactorum conciliari posse, rogo ut hac de re mentem Tuam mihi exponas. Quod superest vale et fave. Dabam Hanoverae 16 Junii 1712.

Deditissimus

Godefridus Guilielmus Leibnitius

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Tametsi de procuranda Theodicaeae recensione Trivultiana multum sollicitus fui, necdum tamen eam nancisci potui. Suspicio fasciculum

I believe that monads always have a full existence, and that they cannot be conceived of as parts that are said to be potentially in a whole. Nor do I see what a dominant monad takes away from the existence of other monads, since there is, in fact, no communication between them but only an agreement. The unity of corporeal substance in a horse does not arise from any refraction of monads⁶ but from a superadded substantial bond, through which nothing at all is changed in the monads themselves. Some worm can be a part of my body and subject to my soul as its dominant monad,⁷ and the same worm can have other little animals in its body subject to its dominant monad. But considered in terms of the monads themselves, domination and subordination consist only in degrees of perception.⁸

If an “accident” is defined as that which demands to exist in a substance, I fear we shall not have explained sufficiently its formal reason, from which it ought to be clear why it demands this. Certainly a substance often demands another substance as well. It would have to be explained what exactly that “being in” is in which the nature of an accident is commonly located. I would say in response to this that it is the modification of a distinct absolute thing.

It is true that the things that happen in the soul must agree with those that happen outside the soul; but for this it is sufficient that those things that happen in one soul correspond both among themselves and with those things that happen in any other soul; and there is no need to posit something outside of all souls or monads. According to this hypothesis, when we say that Socrates is sitting, nothing more is signified than that those things that we understand by “Socrates” and “sitting” are appearing to us and to others to whom it pertains.

Since you judge that the doctrine of transubstantiation can be reconciled with the hypothesis, or fiction,⁹ of bodies reduced to phenomena, I ask that you explain your view of the matter to me. For the rest, farewell and think kindly of me. From Hanover, 16 June 1712.

Most faithfully,
Gottfried Wilhelm Leibniz

53. Des Bosses to Leibniz¹

[Paderborn, 28 August 1712]

Most Distinguished Sir, Most Esteemed Patron,

Although I have tried hard to get hold of the review of the *Theodicy* in the *Mémoires de Trévoux*, I still have not been able to obtain it. I suspect

aliquem a Turnamino ad me missum et mercibus Coloniam destinatis inclusum alicubi detineri uti jam aliquoties contigit. Mitto interim Eminētissimi Ptolemaei litteras, qui TUAS sibi longe gratissimas fuisse ad me scribit optatque TE uti benevola ita et Catholica voluntate nobis esse conjunctum. Prandet ille quotidie cum nostris in Collegio Romano, vetans apponi sibi quidpiam singulare: ita nuper ad me Colonia quidam.

Explicationem Phaenomenorum per Monadum perceptiones utilem esse TEcum censeo ut philosophia naturalis a mathematica discriminetur. Et quamvis corpus mathematicum superaddatur non ideo monades erunt in loco absolute et proprie. Aristoteles ipse docuit indivisibile non moveri per se adeoque non esse in loco per se, sed tantum per accidens. TEcum etiam sentio in eo quod Phaenomena extra animas realizat non concipiendas esse partes actu nisi quae actuali divisione fiunt nec indivisibilia nisi ut extrema. Sed Animal V.G. equum aliter quid unum esse existimo quam totus mundus quid unum sit, idque ob vinculum substantiale quod Monadas equum constituentes quodammodo actuat nec concipere possum quomodo monades eadem prorsus immutatae jam equum constituent jam non constituent, cum ens et unum convertantur. Ubi nova unitas sive unio exurgit ibi et nova quaedam existentia intercedere debere videtur. In quo porro unio illa sive unitas aut existentia consistat non definitio uti TU de unione animae cum corpore respondebas Turnamino.

Ratio quare accidens exigit inexistere substantiae est quia non est ens primum sive ens substratum caeteris entibus sicut ratio cur creatura exigit a Deo pendere est quia non est ens a se vel illimitatum. Nulla substantia tota exigit aliam substantiam adaequate a se distinctam nisi forte concomitanter, et Harmoniae gratia. De caetero Accidentis naturam per hoc quod sit absoluti alieni modificatio explicari posse, non diffiteor nam etiam S. Thomas Accidentis definit modum entis sive substantiae[;] at nolim accidens merum semper modum esse, id est talem qui ne divinitus quidem sine substantia esse queat, nec ullam video contradictionem in eo quod aliquod ens medium detur inter substantiam et merum modum, quod medium ens an accidens vocandum sit lis erit de voce.

that a packet sent to me by Tournemine that included goods destined for Cologne was delayed somewhere, as there have already been several deliveries. In the meantime, I am sending a letter from the most eminent Tolomei, who writes to me that he was extremely grateful for your letter and who prays that you be joined to us by both a benevolent and also a Catholic will. Someone recently reported to me from Cologne that he breakfasts daily with our order in the Collegio Romano, forbidding anything to be served to him alone.

I agree with you that the explanation of phenomena through the perceptions of monads is useful in order that natural philosophy be distinguished from mathematics. And even if a mathematical body is superadded, monads will not for that reason be absolutely and properly in a place. Aristotle himself taught that an indivisible thing is not moved through itself and so is not in a place through itself but only accidentally.² I also agree with you in this: that which realizes the phenomena outside of souls should not be conceived of as actual parts, unless they arise from an actual division, nor as indivisibles, except as end points. But I understand an animal, for example a horse, to be one thing in a different way from the way in which the whole world is one thing, and this is because of the substantial bond that somehow actuates the monads constituting the horse; and I cannot conceive how the same monads, which are entirely unchanged, can at one time constitute a horse and at another not constitute a horse, since being and unity are convertible. Where a new unity or a new union arises, there, too, it seems some new existence must have occurred. Moreover, as you responded to Tournemine concerning the union of soul and body, I do not define in what this union or unity or existence consists.³

The reason why an accident demands to exist in a substance is that it is not a primary being or a being that supports other beings, just as the reason why a creature must depend upon God is that it is not a self-sufficient or unlimited being. No complete substance demands another substance equally distinct from it, except perhaps concomitantly and for the sake of harmony. As for the rest, I do not deny that the nature of an accident can be explained by the fact that it is the modification of a distinct absolute thing, for even St. Thomas defines an accident as a mode of being or substance.⁴ But I do not want an accident to be always a mere mode, that is, the sort of thing that cannot exist without a substance even by divine influence; nor do I see any contradiction in having some middle being between a substance and a mere mode, and whether this middle being ought to be called an accident will be a verbal dispute.

In Hypothesi corporum ad Phaenomena redactorum Transsubstantiationem sic explicare conor.

Ponamus primo Deum aliqua ratione superiori motum in hoc universo monadas aliquammultas destruere et alias prorsus novas substituere. Ponamus deinde residuas omnes monadas earumque perceptiones phaenomenis naturalibus respondentes manere invariatas, non aliter atque si nulla fuisset facta destructio substitutioque monadum. Ponamus denique perceptiones istas invariatas a Deo conservari eo tantum fine ut symbolice repraesentent virtutem aliquam monadum earum quae de novo adveniant, et per solam fidem innotescunt. His positis.

Aio si corpora quatenus sensibilia mera sint phaenomena, nihil ad veram Transsubstantiationem in posito casu defore. Ad hanc enim sufficit ut aliqua substantia desinat esse in rerum natura, alia incipiat esse sub remanente communi accidenti sive phaenomeno uno vel pluribus sub quo vel sub quibus erat illa substantia quae desiit atqui substantiae illae novae sive monades inciperent existere sub iisdem accidentibus sive phaenomenis sub quibus erant priores quae destructae sunt, ergo etc.

Dices fortasse casum esse impossibilem nam variato objecto sive termino cognitionis, variari perceptionem ipsam necesse est. Respondeo variato objecto immediato et motivo ut vocamus variari quoque debere perceptionem non item variato objecto mediato et pure terminante. Perceptio autem illa pro objecto motivo et immediato habet aliquid in anima non enim anima perceptiones suas accipit ab objecto extra animam. Itaque objecta extra animam sunt pure terminativa perceptionis.

Hinc fit dum experimentaliter aliqua cognitione designo aliquod corpus dicendo *Hoc corpus* sive *haec res* non esse necesse ut pronomen demonstrativum *hoc* afficiat ipsam individualitatem substantiae, sed sufficere ut cadat supra individualitatem phaenomeni. Nam *hoc corpus* idem significat ac *res substans his accidentibus sive phaenomenis* ubi individualitas se tenet ex parte phaenomenon. Unde quamdiu manebit res aliqua sive eadem sive diversa substans *his phaenomenis* manebit semper *haec res* sive *hoc*.

At dices necdum intelligi quare monades recens natae incipiant subesse his phaenomenis sive perceptionibus, quid enim eas determinat ut subsint

On the hypothesis of bodies reduced to phenomena, I try to explain transubstantiation in the following way.

Let us suppose first that God was moved by some higher reason to destroy some quantity of monads in the universe and to substitute other entirely new ones. Let us suppose next that all the remaining monads and their perceptions, corresponding to natural phenomena, remain unchanged, just as if the destruction and substitution of monads had not taken place. Finally, let us suppose that those unchanged perceptions are conserved by God to this end alone, that they symbolically represent some quality of the newly arrived monads, which become known by faith alone. With these things supposed . . .

I say that if bodies insofar as they are sensible are mere phenomena, nothing that is required for true transubstantiation will be lacking in the supposed case. For it suffices for this that some substance stop existing in the universe and that another begin to support the residual common accident, or the one or many phenomena that were supported by the substance that ceased to exist; however, these new substances or monads would begin to support the same accidents or phenomena that were supported by the prior ones that were destroyed; therefore, etc.

You will perhaps say that this case is impossible, for it is necessary that the perception itself be altered when the object or terminus of thought is altered. I respond that when the immediate and motive object (as we say) is altered, the perception also must be altered, but the same is not true in the case of the mediate and merely terminating object. Yet this perception, instead of a motive and immediate object, has something in the soul, for the soul does not receive its perceptions from an object outside the soul. And so objects outside the soul are merely the terminating objects of perception.

Therefore, it turns out that, so long as I designate some body by some experiential thought in saying "this body" or "this thing," it is not necessary that the demonstrative pronoun "this" be related to the very individuality of the substance, but it suffices that it be governed by the individuality of the phenomenon; for "this body" signifies the same thing as "the thing supporting these accidents or phenomena," where the individuality remains a part of the phenomena. Thus, as long as some thing remains that supports "these phenomena," whether it is the same or different, "this thing" or "this" will always remain.

But you will say that I have not yet understood how newly produced monads begin to support these phenomena or perceptions; for what makes

potius quam non subsint, ut subsint potius novae illae quam remanentes? Respondeo quaerendo quare monades quae destructae sunt phaenomenis sive perceptionibus illis subesse prius dicerentur? Nunquid ob hanc aliamve similem causam quia monadum illarum jam destructarum existentia erat causa saltem idealis in mente Dei cur Deus tales perceptiones animae meae indiderit? Atqui juxta tertiam suppositionem initio postulatam recentes monades sunt pariter causa idealis conservationis illarum perceptionum sive phaenomenorum in mente mea ergo et hae recentes jam dictis perceptionibus subesse dicendae erunt non minus quam destructae ante suberant. Cum hoc tamen discrimine quod monades destructae naturaliter istis phaenomenis suberant, unde et ipsas sive ipsarum complexum denominabant *extensum coloratum* etc. At monades illae de novo advenientes earumve complexus non denominabitur *extensum coloratum* etc. quia phaenomena non possunt illas denominationes praestare nisi subjectis propriis et connaturalibus. Ad denominationem enim extensi etc. requiritur subjectum capax et proprium. Nihil tamen vetabit quominus illae novae monades designari ac demonstrari per illa phaenomena possint ac dici *hoc* quia cum phaenomena ex natura sua ordinentur ad designandas substantias, et propria substantia absit, unice illam designabunt ad quam symbolice repraesentandam a Deo conservantur utpote quae in absentia propriae et connaturalis substantiae jus ad illa phaenomena proximum habet.

Venio nunc ad Transsubstantiationem Eucharisticam quae juxta hactenus dicta facile explicari potest. Nam Transsubstantiatio hucusque posita ab ea quam in Eucharistia tuetur Ecclesia Romana in eo solum differt quod monadas novas creari supra supposuerim, in Eucharistia vero monades ad Christi corpus pertinentes jam prius extiterint et solum incipiant subesse phaenomenis alienis in quo difficultas esse nulla videtur quae quidem sit catholicis propria. Nam si Deus possit per Phaenomena monadibus destructis respondentia repraesentare symbolice monadas destructis substitutas ac de novo creatas, cur non poterit eodem modo repraesentare aliquas ex praeexistentibus et remanentibus, quales erant monades substantiam corporis Christi constituentes? Existet ergo Christi corpus sub his phaenomenis, atque adeo in hoc spatio nam juxta definitionem quam in

it the case that they support them rather than not support them? What makes it the case that these new monads rather than those that continue to exist support them? I respond by asking why the monads that were destroyed were said previously to support these phenomena or perceptions. Is it for this or another similar reason that the existence of the monads just destroyed was at least an ideal cause in the mind of God for endowing my soul with such perceptions? Nevertheless, as a consequence of the third supposition postulated at the beginning, the new monads are likewise the ideal cause of the conservation of these perceptions or phenomena in my mind. Therefore, these new monads should also be said to support the perceptions just mentioned, no less than the destroyed monads supported them previously. Yet there is this difference, that the monads that were destroyed supported those phenomena naturally, on account of which those very monads or a complex of them were denominated "extended," "colored," etc. But the newly arrived monads or a complex of them will not be denominated "extended," "colored," etc., because the phenomena cannot retain these denominations except in the proper and connatural subjects. For an apt and proper subject is required for the denomination of something as extended, etc. Yet nothing will prevent these new monads from being able to be designated and indicated by these phenomena and from being called "this," because, since phenomena by their own nature are disposed to designate substances, and the appropriate substance is absent, they will designate only that substance which they were preserved by God to represent symbolically, namely that one which, in the absence of a proper and connatural substance, has the next claim to those phenomena.

I come now to eucharistic transubstantiation, which can be easily explained in light of what has so far been said. For the transubstantiation posited to this point differs from that which the Roman church defends in the eucharist only in this: I supposed above that new monads are created, but in the eucharist monads belonging to the body of Christ already existed previously and simply begin to support different phenomena. There does not seem to be any difficulty here that in fact is peculiar to Catholics. For if God could symbolically represent monads that are created anew and substituted for the destroyed ones by phenomena corresponding to the destroyed monads, why should he not be able to represent in the same way some from among the preexisting and remaining monads, such as the monads constituting the substance of the body of Christ? Therefore, the body of Christ may support these phenomena, and so exist in this space; for, in accordance with the definition you proposed in your last letter,

postrema TUA epistola ponis, spatium in hac hypothesi, nihil aliud est quam ordo coexistentium phaenomenorum.

Nec vero ita proprie intelligetur designari et demonstrari per haec phaenomena corpus Christi si monades panem ante constituentes quarum phaenomena haec propria erant, non interierunt. Quia quamdiu manent monades panis, phaenomena illis respondentia proprie in monadas suas cadunt easque duntaxat proprie loquendo designant. Ex quo fiet ut si monades panis maneant, haec propositio: *Hoc est Corpus meum* si intelligenda sit in sensu proprio (uti intelligendos esse textus fundamentales ad Mysteria pertinentes in confesso est) faciet hunc sensum: Panis est Corpus Christi.

Habes Illustrissime Domine cogitata mea de conciliatione doctrinae transsubstantiationis cum hypothesi vel fictione corporum ad phaenomena redactorum. TU si quid novisti rectius istis candidus imperti: Si non his utere mecum.

Izquierdus cum ait Deum necessitatum fuisse moraliter non physice ad mundum creandum nihil aliud vult quam non esse necessitatum metaphysice, uti expresse profitetur paulo ante, et argumenta quibus assertiones suas probat ostendunt. De caetero physicam in rebus creatis necessitatem prout a metaphysica distinguitur ex morali consequi tum ipse tum Esparsa alique egregii explicant et TEcum sentiunt.

Gratissimum mihi fuit quod percipiendo illi Theodicaeae loco ubi ais difficultates de compositione continui admonere nos debere res longe aliter esse concipiendas, lucem mihi aliquam attulisti nec diffiteor quod inquis illam explicationem utilem esse posse ad multas difficultates removendas; patere tamen ut quaedam adhuc obmoveam contra hypothesin illam:

1. Si reali extensione opus non est ad explicanda phaenomena cur opus erit materia sive πρώτῳ ὑποκειμένῳ aut quare sola Entelechia monadem facere non poterit? 2. Cur opus erit infinitis actu monadibus? 3. Si pomum E. G. realiter extensum non est cur potius rotundum apparet quam quadratum? etc.

Dum nuper Augustini cujus hodie festum agimus, Confessionum libros evolverem aliud agens, incidi forte in librum octavum cujus caput secundum legens totum in TE quadrare agnovi cum suspirio, sed magis ubi ad

space, on this hypothesis, is nothing other than the order of coexisting phenomena.

And in fact the body of Christ will not properly be understood to be designated and indicated by these phenomena in this way, if the monads previously constituting the bread, of which these were the proper phenomena, did not perish. For as long as the monads of the bread remain, the phenomena corresponding to them are properly subject to their own monads and to this extent designate them, strictly speaking. From this it follows that, if the monads of the bread remain, the proposition "This is my body," if it is to be understood in the strict sense (as it is acknowledged the fundamental texts pertaining to the mystery should be understood), will have this sense: the bread is the body of Christ.

Most distinguished Sir, you have my thoughts concerning the reconciliation of the doctrine of transubstantiation with the hypothesis or fiction of bodies reduced to phenomena. If you know of anything better in these matters, as an honest person, share it with me; if not, make use of these ideas with me.

When Izquierdo says that God was morally, not physically, necessitated to create the world, he means nothing other than that God was not metaphysically necessitated, as he expressly avows a little earlier and as the arguments by which he proves his assertions show. For the rest, first Izquierdo himself, then Esparza and other distinguished men explain and believe with you that the physical necessity in created things, insofar as it is distinguished from metaphysical necessity, follows from moral necessity.

I was very pleased that, when I looked at the place in the *Theodicy* where you say that the difficulties concerning the composition of the continuum should warn us that things must be conceived very differently, you shed some light on the matter for me; and I do not deny, as you say, that this explanation can be useful in removing many difficulties.⁵ But you should be clear that I still have certain objections to this hypothesis:

1. If there is no need for real extension to explain the phenomena, why will there be need for matter or a primary substratum, or why can an entelechy alone not make a monad? 2. Why will there be a need for an actual infinity of monads? 3. If an apple, for example, is not really extended, why does it appear round rather than square? etc.

While thinking recently about something from Augustine, whose feast we are celebrating today, I perused his *Confessions* and chanced upon book VIII, and, reading its second chapter, I noticed with a sigh of relief that the whole thing agrees with you, and even more so when I came to the

caput quartum perveni. Inspice sodes bina illa capita et mentem meam perspicias. TU Victorinus Simplicianus Ego.

Vale Illustrissime vir et non me tantum sed complures praeterea probos pro salute TUA vota ad Deum assidue nuncupare noveris.

Numinis egregie causam Godefride peroras:
Quae dabit Ille Reus praemia? Posce fidem.

Forsitan instante Octobri Hildesiam profectus videndi TUI occasionem reperiam. Dabam Paderbornae 28 Augusti 1712.

Illustrissime Dominationis TUAE

Devotissimus cliens

Bartholomaeus Des Bosses

P.S. Missam ad Te aliquot abhinc hebdomadis partem translationis meae TIBI traditam fuisse confido.

Leibniz to Des Bosses

Rev.^{me} Pater

Primum Versionis Tuae partem, deinde literas Cardinalis Ptolemaei missu Tuo accepi. Misit etiam R.^{mus} Pater Orbanus icona Insignis Viri. Ex utroque missu magnam voluptatem percepi, optoque ut diu floreat et prosit Vir non uno modo Eminentissimus: idem et Tibi precor, qui ordinem Tuum et rempublicam literariam, non mediocriter ut auguror, illustrabis. Misit et Orbanus Sinenses quasdam novellas, unde intelligo quaeri inter vestros virum in Mathesi practica versatum, dignum surrogari Castnero. Talem vidi Linzii ante aliquot annos, sed vereor ne sit aetate provector, quam ut itineris tanti incommoda ferre possit. Qui nunc apud vos floreat maxime in Mathesi Tuo indicio discere optem.

In Bibliotheca vestra Paderbornensi (si bene memini) vidi olim vetus quoddam Martiani Capellae exemplum, cum Scholiis. Inquire quaeso an adsit, (possum enim errare) et circumstantias Codicis, autoremque Scholiorum, si nomen ascriptum est, indica.

Versio Tua pulchra est, et lucem dabit operi: utor tamen in re pro parte mea, concessa a Te libertate, et cum Te arctius originali astrinxeris, quo fidelior interpres esses; ego nonnulla clarius explico quam sunt in Gallico;

fourth chapter. Please look at both these chapters, and you will see what I mean. You are Victorinus, I, Simplicianus.⁶

Farewell, most distinguished Sir, and know that not just I but many other virtuous men pray assiduously to God for your salvation.

You conclude the case for divine authority very well, Gottfried:
What will the accused give in recompense? Ask for faith.⁷

Perhaps this coming October I shall go to Hildesheim and have the chance to see you. From Paderborn, 28 August 1712.

Your Excellency's most devoted servant,

Bartholomew Des Bosses

P.S. I trust the part of my translation sent to you some weeks ago has been delivered to you.

54. Leibniz to Des Bosses¹

[Wolfenbüttel, 20 September 1712]

Most Reverend Father,

I first received a part of your translation and then the letter of Cardinal Tolomei that you sent. The Reverend Father Orban also sent portraits of that remarkable man. Both of these dispatches pleased me greatly, and I pray that this man who is preeminent in more ways than one flourishes for a long time and does good. And I wish the same for you, who will, I predict, enlighten your order and the republic of letters in no small way. Orban also sent some news relating to China, from which I learn that they are seeking among your order a man versed in practical mathematics, who is worthy to take the place of Castner.² I saw such a person in Linz a few years ago, but I fear he is too old to be able to bear the burdens of such a journey. I should like to learn who among you, in your judgment, is currently doing the best work in mathematics.

In your library in Paderborn (if I remember correctly) I saw some time ago a certain old copy of Martianus Capella with scholia.³ I beg you to inquire whether it is there (for I could be wrong) and note the condition of the codex and the author of the scholia, if a name is given.

Your translation is beautiful, and it will shed light on the work. Nevertheless, for my part, I am enjoying the freedom you have conceded in this matter, and, since you have tied yourself rather closely to the original, and in doing so are a very faithful interpreter, I am explaining some things more clearly than they are in the French; and now and then I have ex-

quaedam interdum enuntio rotundius ut facturus fuisset si latine scripsissem. Ubi Hannoveram reversus fuero, (nunc enim Guelfebyti ago,) ad TE remittam.

Nunc ad literas Tuas Philosophicas venio. Ego quoque sentio admissis Substantialibus praeter monades seu admissa Unione quadam reali, aliam longe esse Unionem quae facit ut animal vel quodvis corpus naturae organicum sit Unum substantiale, habens unam Monada dominantem, quam Unionem quae facit simplex aggregatum, quale est in acervo lapidum: haec consistit in mera unione praesentiae seu locali, illa in unione substantiatum novum constituyente, quod Scholae vocant unum per se, cum prius vocent unum per accidens. Nuspiam dixi Monades prorsus non-mutatas modo equum constituere, modo non constituere; nam cum Monas semper intra se exprimat suas ad caetera omnia relationes, longe alia percipiet cum in equo erit, quam cum in cane. Ad accidentis naturam non sufficit ut sit dependens a substantia, nam et substantia composita dependet a simplicibus seu Monadibus; sed addendum est dependere a substantia tanquam subjecto, et quidem subjecto ultimo, nam potest accidens esse affectio alterius accidentis, v.g. magnitudo caloris vel impetus: ita ut impetus sit subiectum et magnitudo ei insit tanquam abstractum praedicati, cum impetus dicitur fieri magnus vel tantus. Sed calor vel impetus est in corpore tanquam in subjecto; et ultimum subjectum semper est substantia. Et omne accidens est abstractum quoddam, sola vero substantia est concretum:^{L1} et licet accidentia etiam possint habere praedicata concreta, velut cum impetus dicitur magnus, ipsamet tamen concreta non sunt, sed abstracta a praedicatis substantiarum.

Porro substantiam compositam, seu rem illam quae facit vinculum Monadum cum non sit mera modificatio Monadum, nec quiddam in illis existens tanquam subjectis, (neque enim simul pluribus subjectis inesse

L1. DELETED IN DRAFT: | Distinguo autem abstractum entale a mentali. Sic cum dicitur: Petrus est homo, abstractum praedicati est humanitas; seu quae inesse dicitur Petro, sed tale abstractum non est reale, nec aliud significat quam τὸ esse hominem. Cujus indicium est, quod non potest subjectum ex homine fieri non homo, nisi simul pereat; at item si salvo subjecto abstractum praedicati. . . . |

pressed some things in a more polished way, as I should have done if I had written in Latin. When I return to Hanover (for I am now busy in Wolfenbüttel), I shall send it back to you.

I come now to the philosophical parts of your letter. I also believe that when substantial things besides monads are admitted, that is, when a certain real union is admitted, the union that brings it about that an animal or some organic body of nature is a substantial unity, having one dominant monad, is very different from the union that makes a simple aggregate, such as is in a pile of stones: the latter consists in a mere union of presence or place, the former in a union constituting a new substantiated thing. The schools call the one a “per se unity” and the other an “accidental unity.” Nowhere did I say that the completely unchanged monads sometimes constitute a horse and sometimes do not constitute one; for since a monad always expresses within itself its relations to all other monads, it will perceive very different things when it is in a horse from when it is in a dog. It does not suffice for the nature of an accident that it depend upon a substance, for a composite substance also depends upon simple substances or monads; rather, it should be added that it depends upon a substance as a subject, and, indeed, as an ultimate subject; for an accident can be an affection of another accident, for example, the magnitude of heat or of impetus, so that impetus is the subject, and magnitude is in it as an abstraction of the predicate, when it is said that impetus is great or so much. But heat or impetus is in a body as in a subject, and the ultimate subject is always a substance. And every accident is a kind of abstraction; in truth, substance alone is concrete.^{L1} And although it is also possible for accidents to have concrete predicates, as when impetus is said to be great, yet they themselves are not concrete but are abstracted from the predicates of substances.

Furthermore, I should think that composite substance, or that thing that produces a bond of monads, since it is not a mere modification of monads or something existing in them as subjects (for the same modification could

L1. DELETED IN DRAFT: | But I distinguish an abstraction in existence from a mental abstraction. Thus, when it is said “Peter is a man,” the abstraction of the predicate is humanity, or that which is said to be in Peter; but such an abstraction is not real, nor does it signify anything other than “being a man.” A sign of this is that a subject cannot bring about a “non-man” from a man unless it perishes at the same time; but likewise if, with the subject remaining, an abstraction of the predicate. . . . |

eadem modificatio posset) statuerem dependere a Monadibus; non dependentia logica, (ita scilicet ut nec supernaturaliter ab iis separari possit) sed tantum naturali, nempe ut exigat illa unire in substantiam compositam, nisi Deus aliter velit, nam potest Deus eandem aliis monadibus uniendis applicare, ita ut priores unire desinat; potest etiam ipsam plane tollere et aliam alias monades unientem, huic substituere; idque vel ita, ut alias monades unire desinat, et transferatur de Monadibus in Monades, vel ita ut suas Monades quas naturaliter unit, retineat, nunc vero supernaturaliter uniat etiam novas. Et hoc videtur secundum vestros dicendum de mutatione totius substantiae corporis in totam substantiam alterius corporis, quod tamen suam priorem naturam retineat.

Veniamus jam ad accidentia realia, quae huic Rei Unitivae inerant tantquam Subjecto. Et convenies opinor, quaedam esse non nisi ejus modificationes, quae proinde cum ipsa sublata tollentur. Sed quaeritur an non sint accidentia quaedam, quae sint plus quam modificationes. Videntur autem haec esse plane superflua, et quicquid ipsis praeter modificationem inest, videtur ad ipsam pertinere rem substantialem. Nec video quomodo possimus abstractum distinguere a concreto seu subjecto cui inest, aut explicare intelligibiliter quid sit τὸ inesse vel inhaerere subjecto nisi considerando inhaerens ut modum seu statum subjecti; qui vel essentialis est, nec nisi mutata substantiae natura mutari potest, nec revera ab ea nisi respectu differt; vel est accidentalis et appellatur modificatio qui nasci et interire potest manente subjecto. Quodsi alium modum nosti explicandi *inhaerentiam*, hunc suggere quaeso, ab eo enim res penderet. Quod si fieri non potest, verendum est ne accidentia realia conservari dicendo revera conservetis substantiam, et ita revera tota substantia non transmutetur. Unde etiam Graeci quidam, si bene memini, accidentia realia conservari negant, quia verentur ne simul conservetur natura et substantia.

Ais videri Ens medium dari posse inter substantiam et modificationem. Ego vero putem id medium esse ipsum unum per se substantiatum, seu substantiam compositam, ea enim media est inter substantiam simplicem, quae praecipue nomen substantiae meretur, et modificationem. Substantia simplex est perpetua; substantiatum nasci et interire potest, et mutari; ac-

not be in many subjects at the same time), depends upon monads. This is not a logical dependence (that is, such that it cannot be supernaturally separated from them) but only a natural one, namely, such that it requires that they unite in a composite substance, unless God wills otherwise. For God can apply this same thing to unify other monads, so that it stops unifying the previous ones. He can also remove it completely and substitute for it another thing that unifies other monads; and this can be done either in such a way that it ceases to unify the other monads and is transferred from one group of monads to another, or in such a way that it retains its own monads, which it naturally unites, and now also unites new ones supernaturally. And according to your view it seems that this should be said concerning the change of the whole substance of a body into the whole substance of another body, which nonetheless retains its prior nature.

Let us come now to the real accidents that were in this unifying thing as in a subject. You will agree, I believe, that some are only its modifications, which accordingly are destroyed when it itself is destroyed. But it is asked whether there are not some accidents that are more than modifications. Yet these seem to be clearly superfluous, and whatever is in these things themselves beyond a modification seems to pertain to the substantial thing itself. I do not see how we can distinguish an abstract thing from a concrete thing, or from the subject in which it is, or explain intelligibly what it is to be in or to inhere in a subject, except by considering inherence as a mode or a state of a subject; and this is either essential, and so cannot be changed unless the nature of the substance is changed and does not really differ from it except in respect; or it is accidental, and called a modification, which can arise and perish while the subject remains. Now if you know of another way of explaining "inherence," I ask that you suggest it, for the issue will depend upon it. But if this cannot be done, it must be feared that, in saying that real accidents are conserved, you are really conserving the substance, and so in fact the whole substance will not be changed. And for this reason, if I remember correctly, certain Greeks deny that real accidents are conserved, because they are afraid that the nature and substance will be conserved at the same time.

You say that it seems that there can be a middle being between substance and modification. But I think that this middle being itself is a substantiated per se unity, that is, a composite substance, for this is a middle thing between a simple substance, which chiefly deserves the name "substance," and a modification. Simple substance is perpetual;⁴ a substantiated thing can arise and perish, and be changed; an accident is that which comes to be or ceases to exist when a substance is changed while endur-

cidens est id quod nascitur aut desinit substantia mutata sed manente.^{L2} Caeterum accidens non est capax novae modificationis, per se scilicet, sed tantum per accidens, quatenus inest substantiae per alia etiam accidentia modificatae; v.g. Impetus vel Calor idem in corpore A, nunc est praesens corpori B, nunc ab eo remotus ob praesentiam vel remotionem corporis A^{L3}; sed idem impetus non potest esse major et minor, manenti etiam priori minori accessit novus gradus, et totalis sequens est alius a totali praecedente. Similiter idem impetus non potest dirigi nunc in hanc nunc in illam plagam, sed novus impetus aliam habens directionem, priori additus, facit novam directionem totalem, partiali utraque manente. Totalis autem impetus etiam ipse alteri compositus novum totalem parit.

His positis, putem transsubstantiationem vestram explicari posse, re-tentis Monadibus, (quod magis rationi et ordini universi consentaneum videtur) sed vinculo substantiali corporis Christi ad Monades panis et vini substantialiter uniendas a Deo adhibito; destructo autem priore vinculo substantiali et cum eo ipsius modificationibus seu accidentibus. Ita sola supererunt phaenomena Monadum panis et vini, quae futura fuissent, si nullum vinculum substantiale horum Monadibus a Deo additum fuisset. Etsi autem panis vel vinum non sit substantiatum constituens unum per se nec proinde uno vinculo substantiali connectatur; est tamen aggregatum ex corporibus organicis, seu substantiatis, constituentibus unum per se; quorum vincula substantialia tollerentur, et a vinculo substantiali corporis Christi supplerentur. Cum dicitur *hoc est Corpus*, tunc admissis substantiis compositis non Monades designantur vel per *hoc*, vel per *corpus* (quotusquisque enim de illis cogitavit?); sed substantiatum per vincula substantialia ortum, seu compositum.^{L4}

L2. PARTIALLY DELETED IN MARGIN OF DRAFT: Concretum distingui potest in accidentale, velut Calidum, Homo Calidus, et substantiale. Porro substantialia divido in substantias simplices, ut Deus, Angelus, anima, et substantiata. Substantiatum in unum per se seu substantiam compositam, et unum per accidens seu aggregatum. | Et haec omnia sunt concreta ipsa autem concreta potest aliter distingui in concreta per se |

L3. DELETED IN DRAFT: | et inter circulandum, dum luna circa terram diversas plagas respicit, eo ipso etiam mutatur |

L4. PARTIALLY DELETED IN DRAFT: | Si vero nulla essent vincula realia substantialia monadum, non daretur, et tamen defendi deberet transsubstantiatio recurrendum (fateor) tecum foret ad Monadum panis et vini destructionem, |

Venio nunc ad Tuam explicationem Transsubstantiationis, instituendam | quas

ing.^{L2} Yet an accident is not capable of a new modification, that is, not capable through itself, but only accidentally, insofar as it is in a substance also modified by another accident. For example, the same impetus or heat that is in body A is now present in body B, now absent from it, because of the presence or absence of body A.^{L3} But the same impetus cannot be greater or smaller. With the previous smaller impetus still remaining, a new degree is added, and the subsequent total is different from the preceding total. Similarly, the same impetus cannot be directed now into this area, now into that area; rather, a new impetus, having a different direction and added to the previous impetus, effects a new total direction, with both partial impetuses remaining. But the total impetus, itself still composed of the other two, produces a new total.⁵

With these things assumed, I think that your transubstantiation can be explained by retaining monads (which seems to agree better with the reason and order of the universe), but with the substantial bond of the body of Christ added by God to unite the monads of the bread and wine substantially, while the former substantial bond is destroyed, and with it its modifications or accidents. Thus there will remain only the phenomena of the monads of the bread and wine, which would have been there, if no substantial bond had been added to their monads by God. But even if bread or wine is not a substantiated thing constituting a per se unity, and hence not connected to one substantial bond, it is nevertheless an aggregate of organic bodies, or substantiated things, constituting a per se unity,⁶ whose substantial bonds would be removed and replaced by the substantial bond of the body of Christ. When it is said “This is [my] body,” then, with composite substances admitted, we do not designate monads by either “this” or “body” (for how many have thought of them?), but the substantiated thing arising or composed through substantial bonds.^{L4}

L2. PARTIALLY DELETED IN MARGIN OF DRAFT: The concrete can be divided into the accidental, like warm, warm man, and the substantial. I further divide the substantial into simple substances, like God, an angel, a soul, and substantiated things; the substantiated, into per se unity or composite substance, and accidental unity or aggregate. | And all these things are themselves concrete, but the concrete can likewise be divided into per se concrete |

L3. DELETED IN DRAFT: | and in orbiting, when the moon faces different areas around the Earth, it is also by that fact changed |

L4. PARTIALLY DELETED IN DRAFT: | But if there were no real substantial bonds of monads, this would not be conceded, and if transubstantiation still must be defended, I grant that one would have to fall back with you on the destruction of the monads of the bread and wine, |

I come now to your proposed explanation of transubstantiation, | which you pre-

Venio nunc ad Tuam explicationem Transsubstantiationis, instituendam si nulla essent vincula substantialia, et substantiata mera essent phaenomena. Ais monades panis et vini destrui, aliasque illis substitui, manentibus tamen in Animabus omnibus panis et vini perceptionibus, perinde ac si monades earum mansissent. Porro substitutas ponis esse monades Corporis Christi. Sed ipse quaeris merito cur dicamus alias Monades prioribus substitutas, aut in quo consistat illa substitutio, nec video quomodo id explicari possit, eo casu quo nihil in natura ponitur, nisi Monades et Monadum perceptiones, nisi Monadibus Corporis Christi tribuamus perceptiones respondentes perceptionibus Monadum destructarum. Sed ita revera dicendum foret accidentia panis et vini fore in Corpore Christi, quod merito improbatur. Neque tò *hoc est* illis Corporis Christi Monadibus recte tribueremus ex hoc solo quod fuerint causae ideales in mente Dei harum in nobis perceptionum; causae ideales rationem causandi habent perceptionum alienarum per perceptiones suas illis respondentes. Neque itaque Monades Corporis Christi causa idealis essent phaenomenorum nostrorum nisi aliquid in se haberent respondens quod causalitatem fundaret, id est nisi perceptiones eorum tales essent quales fuerant in Monadibus panis et vini, ut causae tales ideales nostrarum perceptionum atque adeo subjecta accidentium apparentium appellari mererentur. Vix itaque video quomodo res ex meris monadibus et phaenomenis sufficienter explicari possit, sed addendum est aliquid realisans. Admissa autem realisatione phaenomenorum et substantiis compositis, putem non esse opus sublatione Monadum, sed sufficere sublationem et substitutionem ejus, quod substantiam compositam formaliter constituit, quod Monades non faciunt, quae manente substantia composita adesse vel abesse possunt.

Quaeris, si reali extensione opus non est, cur opus sit materia prima, nec sola Entelechia Monadem constituat? Responderem, si solae sunt Monades cum suis perceptionibus materiam primam nihil aliud fore quam potentiam Monadum passivam, et Entelechiam fore eandem activam; sin addas substantias compositas, dicerem in ipsis principium resistentiae

adhibes binas, unam | si nulla essent vincula substantialia, ut | corpora et substantiata | substantiata mera essent phaenomena; | alteram ex suppositis vinculis substantialibus. In priore ais priores | Ais monades

I come now to your proposed explanation of transubstantiation, if there were no substantial bonds and substantiated things were mere phenomena. You say that the monads of the bread and wine are destroyed, and that other monads are substituted for them, while all the perceptions of the bread and wine remain in souls, just as if their monads had remained. Moreover, you suppose that the monads of the body of Christ are substituted. But you yourself rightly ask why we say that other monads are substituted for the former ones, or in what this substitution consists; and I do not see how this could be explained in this case, in which nothing is posited in nature except monads and the perceptions of monads, unless we attribute to the monads of the body of Christ perceptions corresponding to the perceptions of the destroyed monads. But if this were truly so, it would have to be said that the accidents of the bread and wine were in the body of Christ, which is rightly rejected. And we would not correctly attribute the “this is” to those monads of Christ’s body simply from the fact that they were the ideal causes in God’s mind of these perceptions in us; ideal causes contain the reason for the causation of other perceptions through their own perceptions that correspond to them.⁷ And so the monads of Christ’s body would not be the ideal cause of our phenomena, unless they had something corresponding in them that would ground the causality, that is, unless their perceptions were such as had been in the monads of the bread and wine, as ideal causes of this sort of our perceptions, and to that extent they would deserve to be called the subjects of apparent accidents. Thus I hardly see how the matter can be adequately explained by mere monads and perceptions; on the contrary, some realizing thing must be added. But with the realization of phenomena and composite substances admitted, I think that there is no need for the destruction of monads, but that it is enough to have the destruction and substitution of the thing that formally constitutes composite substance, which the monads, since they are able to be present or absent while the composite substance remains, do not produce.

You ask why there is a need for primary matter if there is no need for real extension, and why an entelechy alone does not constitute a monad. I would respond that if there are only monads with their perceptions, primary matter will be nothing other than the passive power of the monads, and an entelechy will be their active power; if you add composite sub-

sent in two ways, the one, | if there were no substantial bonds, so that | bodies and substantiated things | substantiated things were mere phenomena, | the other, on the supposition of substantial bonds. In the first, you say the prior | You say

accedere debere principio activo, sive virtuti motivae. Quaeris porro cur infinitae actu monades? Respondeo ad hoc suffecturam earum possibilitatem, cum praestat quam ditissima esse opera Dei: sed idem exigit rerum ordo, alioqui non omnibus assignabilibus percipientibus phaenomena responderent. Et sane in nostris perceptionibus utcunque distinctis intelligimus confusas inesse ad quantamlibet parvitatem; itaque his Monades respondebunt ut majoribus distinctioribusque respondent. Quaeris denique, si pomum realiter extensum non est, cur rotundum apparet potius quam quadratum. Respondeo pomum ipsum cum sit ens per aggregationem non nisi phaenomenon esse. Quod superest vale et fave. Dabam Guelphebyti 20 Sept. 1712.

deditissimus

G. G. Leibniti

P.S. Gratissimum erit aspectu Tuo frui, ubi proximo mense in has partes excursionem feceris.

Leibniz to Des Bosses

R^{me} Pater

Doleo me sperato colloquio Tuo privari. Ego quidem ex quo nuperum fasciculum Dno. D. Behrensi misi, semper hic haesi.

Redit hic praeclara versio Tua, in qua recensenda plusculum mihi alicubi indulsi, quod Tu quidem tanquam in alieno arctius Te verbis as-trinxeris, ego vero liberius quaedam expressi, ut minus Gallicas origines in Latino sapiant.

Nescio an ex Te quaesierim in amici gratiam, utrum Colonia vel Nuissia sciri possit quis fuerit auctor magni Chronici Belgici a Pistorio editi. Fuit Canonicus regularis Nuissiensis, sed nomen et alia ad virum pertinentia scire vellemus.

Si ratio excogitari posset corporibus licet ad sola phaenomena redactis explicandi possibilitatem τοῦ μετουσιασμοῦ vestri, id pridem mallet. Nam hypothesis illa multis modis placet. Nec aliqua alia re quam monadibus earumque modificationibus internis ad philosophiam sepositis super-

stances, I would say that in these things a principle of resistance must be added to the active principle or motive force. Furthermore, you ask why there is an actual infinity of monads. I respond that the possibility of this will suffice to establish it, since it is obvious how bountiful the works of God are. But the order of things demands the same thing; otherwise the phenomena would not correspond to all assignable perceivers. And certainly, however distinct they may be, we discern confusions in our perceptions to some small degree; and so monads will correspond to these confused perceptions just as they correspond to greater and more distinct ones. Finally, you ask why, if an apple is not really extended, it appears round rather than square. I respond that the apple itself, since it is a being by aggregation, is nothing but a phenomenon. For the rest, farewell and think kindly of me. From Wolfenbüttel, 20 September 1712.

Most faithfully,

G. W. Leibniz

P.S. It will be a great pleasure to enjoy your company when you make the journey to these parts next month.

55. Leibniz to Des Bosses¹

[Hanover, 10 October 1712]

Most Reverend Father,

I am sorry that I am to be deprived of the anticipated conversation with you. In fact I recently sent a packet to Dr. Behrens from here, which is where I have been staying the whole time.²

I am herewith returning your beautiful translation. I have indulged myself somewhat by revising it in a few places, because you have bound yourself rather closely to the words as if they were foreign to you, whereas I have expressed some things more freely so that they resemble the original French less in Latin.

I wonder whether I might ask a favor in friendship from you—whether it can be ascertained in Cologne or Neuss who the author of the *Great Chronicle of Belgium*, edited by Pistorius, was. He was a regular canon in Neuss; but I wish to know the name and other things pertaining to the man.³

If an account could be devised for explaining the possibility of your transubstantiation, although bodies are reduced to phenomena alone, I should have opted for it long ago. For this hypothesis is pleasing in many ways. We do not need anything other than monads and their internal mod-

naturalibus indigemus. Sed vereor ut mysterium incarnationis aliaque explicare possimus, nisi vincula realia seu uniones accedant. Quod superest vale et fave, ac feliciter iter Tuum perage. Dabam Hanoverae 10 Octobr. 1712.

deditissimus

G. G. Leibniz

P.S. Pecuniam Dno. Romerskirchio debitam adjicio, quae paululo minus quam 5 thaleros conficit, quos mitto, rogoque ut ei solvi cures.

Des Bosses to Leibniz

Illustrissime Vir, Patrone Colendissime

Fasciculum cum Orbani litteris abinc octiduo a me via Hildesiensi missum ad TE pervenisse confido. Martiani Capellae nullum prorsus exemplum in bibliotheca nostra invenio. Cum vero tale omnino quale mihi describis in Monasteriensis collegii nostri bibliotheca vidisse alias meminerim in illud inquirendum recens curavi. Scripsi etiam Novesium circa autorem Magni Chronici Belgici, utroque e loco responsum exspecto indies.

Mathematicos insignes (ut Gallos praeteream, quorum Specimina in Diario Trivultiano videre licet) habet Anglicana nostra Provincia, quae ut nosti Leodii Collegium numerosum habet quos inter Novi Patrem Gouden (nunc Theologiae professorem) a quo prodiit Trigonometria Sphaerica passim valde commendata, et in Actis Lipsiensibus initio hujus saeculi recensita. Alium cujus nomen excidit vidi ante annos aliquot in eodem collegio, aiebant nostri eum in Analysisi et reconditiori Mathesi versatissimum esse. Nostra Provincia paucos numerat hoc in studio excellentes nam Pater Henricus Georgii senior jam est et emeritus. Spes tamen est fore ut nobilissima haec disciplina brevi invalescat. Nam lectio mathematica quae hucusque privatis Philosophiae auditoriis continebatur hoc demum anno, me quoque adlaborante, his angustiis eluctata publice ad quosvis auditores haberi Coloniae coepta est auspice Patre Quirorio Cuniberto viro solerti et industrio.

Venio jam ad capita philosophica litterarum Tuarum, quas, ut clarius mentem meam explicem, in periodos membratim dispertior, ac respon-

ifications, with supernatural things excluded from philosophy. But I fear that we cannot explain the mystery of the incarnation and other things unless real bonds or unions are accepted. For the rest, farewell, think kindly of me, and complete your journey happily. From Hanover, 10 October 1712.

Most faithfully,

G. W. Leibniz

P.S. I am enclosing the money that I owe Mr. Romerskirchen.⁴ It totals a little less than five talers, which I am sending, and I ask that you take care to pass it on to him.

56. Des Bosses to Leibniz¹

[Paderborn, 12 December 1712]

Most Distinguished Sir, Most Esteemed Patron,

I trust that the packet containing Orban's letter that I sent you by way of Hildesheim a week ago has arrived. I can find no copy of Martianus Capella in our library at all. Since I remember your telling me that you had indeed seen such a thing on another occasion in the library of our college monastery, I recently asked that this be investigated.² I also wrote to Neuss concerning the author of the *Great Chronicle of Belgium*, and I expect a response from both places any day now.³

Our English province has remarkable mathematicians (to say nothing of the French, examples of whose work you may see in the *Mémoires de Trévoux*). As you know, it has a large college in Liège, among whose members I have come to know Father Gooden (now professor of theology), who wrote *Spherical Trigonometry*, which has been highly praised in all quarters and which was reviewed in the *Acta eruditorum* at the beginning of the century.⁴ I saw another mathematician, whose name escapes me, some years ago in the same college; our people claimed that he was the most skilled in analysis and higher mathematics. Our province possesses few who excel in this study, for Father Henricus Georgius is now quite old and retired. Still, there is perhaps hope that this most noble discipline may shortly grow strong. For a mathematical text that was reserved for private students of philosophy until just this year (though I, too, toiled away at it) has been freed from this restriction and has begun to be sold publicly to any student in Cologne under the auspices of Father Quirorius Cunibertus, a clever and industrious man.

I come now to the philosophical points of your letters, which I am dividing piecemeal into sentences, to which I add my responses, so that I

sionem meam subjungo. Tu conatus meos qualescumque boni consule. Verba Tua repraesento lineis subducta.

1. *Putem, inquis, μετουσιασμὸν vestrum explicari posse retentis monadibus (quod magis rationi et ordini universi consentaneum videtur) sed vinculo substantiali corporis Christi ad monades panis et vini substantialiter uniendas a Deo adhibito, destructo autem priore vinculo substantiali, et cum eo ipsius modificationibus seu accidentibus, ita sola supererunt phaenomena monadum panis et vini quae futura fuissent si nullum vinculum substantiale horum monadibus a Deo additum fuisset. Etsi autem panis vel vinum non sit substantiatum constituens unum per se nec proinde uno vinculo substantiali connectatur est tamen aggregatum ex corporibus organicis seu substantiatis constituentibus unum per se quorum vincula substantialia tollerentur et a vinculo corporis Christi supplerentur.*

Fateor sane explicationem hanc ingeniosissimam esse, sed hoc pacto videntur non sola accidentia sive phaenomena panis et vini esse mansura sed etiam magna imo potissima pars substantiae scilicet ipsae monades quae quomodo a constitutione panis et vini excludi possint non satis video. Dogma Ecclesiae est, ut nosti, substantiam totam panis et vini perire. Vinculum illud monadum tam parum videtur esse posse tota substantia panis quam parum vinculum inter animam et corpus est tota substantia hominis.—Quod ais magis rationi et ordini universi consentaneum videri ut retineantur monades. Verum est de ordine quatenus nobis notus est sed quis novit num Deus rationes altissimas non habuerit ipsas etiam monadas destruendi? Nempe quemadmodum in mysterio Incarnationis Deus voluit ut humana natura licet substantia in se sit, habeat tamen in Christo modum essendi similem accidenti cum ad personae constitutionem non pertineat. Ita e contra ob rationes nobis incognitas voluerit ut in Eucharistia quae mirabilium Dei Mnemosynon est accidens sive phaenomenon haberet modum essendi, quasi per se.

2. *Monades puto existentiam semper habere plenam nec concipi posse ut partes potentia dicuntur esse in toto.* Monades semper habent unitatem plenam simplicem, sed non semper eandem compositam quia nunc sunt partes hujus substantiae compositae nunc illius. Unitas simplex est monadibus adaequate identificata, unitas composita non item sed identifi-

may explain my view more clearly. Reflect on whatever may be good in my efforts. I indicate your words by underlining [rendered here in quotation marks].

1. "I think," you say, "that your transubstantiation⁵ can be explained by retaining monads (which seems to agree better with the reason and order of the universe), but with the substantial bond of the body of Christ added by God to unite the monads of the bread and wine substantially, while the former substantial bond is destroyed, and with it its modifications or accidents. Thus there will remain only the phenomena of the monads of the bread and wine, which would have been there, if no substantial bond had been added to their monads by God. But even if bread or wine is not a substantiated thing constituting a *per se* unity, and hence not connected to one substantial bond, it is nevertheless an aggregate of organic bodies, or substantiated things, constituting a *per se* unity, whose substantial bonds would be removed and replaced by the substantial bond of the body of Christ."⁶

I readily grant that this explanation is most ingenious, but I do not entirely see how not only the accidents or the phenomena of the bread and wine will seem to remain but also a considerable, indeed the chief, part of the substance, that is, the monads themselves, which could be excluded in some way from the constitution of the bread and wine. The dogma of the Church, as you know, is that the whole substance of the bread and wine perishes. That bond of monads seems as little able to be the whole substance of the bread as the bond between the soul and the body is the whole substance of a human being.—Now you say that it seems more reasonable and befitting of the order of the universe that monads be retained. This is true of the order of the universe to the extent that it is known to us; but who knows whether or not God had the highest reasons for destroying even these monads? Indeed, just as in the mystery of the incarnation God wanted human nature, though in itself a substance, to have nonetheless in Christ a way of being similar to an accident, since it does not pertain to the constitution of the person, so in the same way, for reasons unknown to us, God may have wanted an accident or a phenomenon in the eucharist, which is a wonderful memorial of God, to have a quasi-independent way of being.

2. "I believe that monads always have a full existence, and that they cannot be conceived of as parts that are said to be potentially in a whole."⁷ Monads always have a full, simple unity, but not always the same composite unity, for they are parts now of this composite substance, now of that one. Simple unity is identified adequately with monads; composite

catur toti complexo monadum ita modificatarum ut substantiam compositam constituent.

3. *Nec video quid monas dominans aliarum monadum existentiae detrahat cum revera inter illas nullum sit commercium sed tantum consensus.* Cum monadas mutari debere concedas dum equum modo constituunt modo non constituunt, id quod de novo positum in monadibus efficit ut equum constituent dicam esse partem ejus unitatis sive existentiae substantialis equinae, non enim vinculum illud substantiale absolutum se solo facit ut monas aliqua subordinata sit pars actualis equini compositi, cum vinculum illud nunquam destruat, et tamen monades illae non semper maneant partes actuales illius compositi equini sed jam hae jam illae illud constituent, jam hae jam illae recedant, manente solum eadem monade dominante.

4. *Unitas substantiae non oritur ab aliqua refractione monadum sed a vinculo substantiali superaddito per quod in monadibus nihil prorsus immutatur.* Vinculum illud substantiale absolutum se solo adaequate non facit ut monas aliqua subordinata sit pars actualis compositi equini, alioqui monas quae semel fuit subordinata, sive semel fuit pars equini compositi semper deberet manere talis, cum vinculum illud semper maneat; atqui potest Deus, ut infra dicis, illud vinculum aliis monadibus uniendis applicare ita ut priores unire desinat, imo transferre de monadibus in monadas etc. Quo posito sic argumentor. Extiterunt a mundi creatione omnes monades tam dominans quam subordinatae equinum compositum heri natum constituentes. Exstitit etiam a mundi creatione vinculum substantiale absolutum illarum, nihil enim absolutum nascitur aut interit. Nec tamen a mundi creatione extitit equinum compositum heri natum ergo equinum compositum quod heri natum est non potest adaequate consistere in monadibus illis et vinculo illo substantiali absoluto sed debet praeterea includere aliquem modum his absolutis affixum. Quae enim adaequate sunt eadem, eorum unum non potest existere vel extitisse quin alterum pariter existat vel extiterit.—Jam vero per refractionem monadum nihil aliud intellexi quam modum sive modos monadum quae ante sui juris erant dum dominabantur, nunc autem subordinantur alteri dominanti V.G. equinae a qua compositum totum sumit denominationem.

5. *Nuspiam dixi monadas prorsus non mutatas modo equum constituere modo non constituere, nam cum monas semper intra se exprimat suas ad*

unity is not the same, but is identified with the whole complex of monads, and thus of modifications, so that they constitute a composite substance.

3. "Nor do I see what a dominant monad takes away from the existence of other monads, since there is, in fact, no communication between them but only an agreement."⁸ Since you concede that the monads must be changed when they first constitute a horse and afterward do not constitute it, I will say that that which, when posited anew in monads, brings it about that they constitute a horse is part of this unity or substantial existence of the horse; for that absolute, substantial bond does not bring it about by itself alone that some subordinate monad is an actual part of the composite horse, since that bond is never destroyed; and yet those monads do not always remain actual parts of that composite horse, but now these constitute it, now those, now these break away from it, now those, with only the same dominant monad remaining.

4. "The unity of the substance does not arise from any refraction of monads but from a superadded substantial bond, through which nothing at all is changed in the monads."⁹ That absolute, substantial bond does not bring it about adequately by itself alone that some subordinate monad is an actual part of the composite horse; otherwise a monad that was at one time subordinate or was at one time a part of the composite horse should always remain so, as long as that bond remains. And, as you say later, God can apply that bond to unify other monads, so that it will stop unifying the previous monads, and indeed God can transfer that bond from monads to monads, etc. With this assumed I offer the following argument. All the monads constituting a composite horse born yesterday—the dominant monad as well as the subordinate monads—have existed since the creation of the world; and the absolute, substantial bond of these monads has also existed since the creation of the world, for nothing absolute arises or perishes. But the composite horse born yesterday has not existed since the creation of the world; therefore, the composite horse born yesterday cannot adequately consist in those monads and that absolute, substantial bond, but must also include some mode affixed to these absolute things. For where things are adequately the same, one of them cannot exist or have existed unless the other exists or has existed at the same time. Now, in fact, by the refraction of monads I understood nothing but a mode or modes of the monads that were previously independent while they were dominant, but now are subordinated to another dominant monad, for example to the horse's dominant monad, from which the whole composite takes its name.

5. "Nowhere did I say that the completely unchanged monads sometimes constitute a horse and sometimes do not constitute one; for since a

caetera omnia relationes longe alia percipiet in equo quam in cane. Censeo mutationem monadum in casu praesenti non consistere solum in perceptionum diversitate quae accidentalis est sed involvere praeterea substantialem aliquam diversitatem ipsis novis perceptionibus priorem, nam perceptionum novarum diversitas notabilis oritur ex diversitate saltem modali substantiali principii.

6. *Porro substantiam compositam seu rem illam quae fuit vinculum monadum cum non sit mera modificatio monadum nequaquam in illis existens tanquam in subjectis neque enim pluribus subjectis inesse eadem modificatio posset.* Aio modos illos substantiales, quorum singuli singulis monadibus tam dominanti quam subordinatis insunt, esse vinculum substantiale monadum inter se in ordine ad faciendum compositum equinum; nec refert quod idem modus pluribus simul subjectis inesse non possit. Nam sicut *πρῶτον ὑποκείμενον* et *ἐντελέχεια* unum simplex efficiunt quia licet realiter distincta invicem non tamen indifferentia sunt ad efficiendam monada, ita nec istae monades compositi equini postquam modis illis substantialibus affectae sunt, indifferentes sunt ad efficiendam substantiam compositam, adeoque ad id munus nullo alio vinculo substantiali indigebunt. Porro unitas compositi illius consistet in eo quod omnes illae monades per modos substantiales singulis proprios subordinentur uni monadi dominanti quae monas dominans denominabit compositum unum atque ita compositum unum nihil aliud erit quam una monas sibi reliquas substantialiter subordinans.

6.—*Statuerem dependere (vinculum substantiale) a monadibus non dependentia logica, ita scilicet ut nec supernaturaliter ab iis separari possit sed tantum naturali, nempe ut exigat illa unire in substantiam compositam nisi Deus aliter velit.* Si vinculum illud monadum pendeat a monadibus dependentia saltem naturali vide quaeso an non ipsi convenire possit Aristotelica definitio accidentis prout a *Smigletio* explicatam reperiis in adjecta huic epistolae pagina. Certe substantia composita sufficienter constituetur per modos illos substantiales singulis monadibus proprios. Erit itaque vinculum illud vel realizatio *phaenomenon* in substantia composita non ut pars, ita tamen ut sit impossibile esse (saltem naturaliter) sine illa. Ergo erit accidens Aristotelicum cum vero supernaturaliter existere possit sine illo, jam non est modus ergo accidens absolutum.

monad always expresses within itself its relations to all other monads, it will perceive very different things when it is in a horse than when it is in a dog.”¹⁰ I think that a change of monads in the present case does not consist solely in a difference of perceptions, which is accidental, but also involves some substantial difference, prior to these new perceptions; for a notable difference in the new perceptions arises from at least a modal difference in a substantial principle.

6[a].¹¹ “Furthermore, composite substance, or that thing that makes¹² a bond of monads, since it is not a mere modification of monads nor anything existing in them as in subjects, for the same modification could not be in many subjects. . . .”¹³ I say that those substantial modes, individual ones of which are in individual monads, both the dominant monad and the subordinate monads, are the substantial bond of the monads ordered among themselves to make the composite horse; and it does not matter that the same mode cannot be in many subjects at the same time. For just as a primary substratum and an entelechy bring about one simple thing, because though they are really distinct from each other they still are not indifferent to the producing of a monad, in the same way those monads of the composite horse, after they have been affected by these substantial modes, are not indifferent to the producing of a composite substance, and so they will not need any other substantial bond for this function. Besides, the unity of that composite consists in the fact that all those monads are subordinated to one dominant monad by the substantial modes particular to each individual, and this dominant monad will denominate one composite thing; and so the one composite thing will be nothing other than one monad substantially subordinating the remaining monads to itself.

6[b]. “I should think that (the substantial bond)¹⁴ depends upon monads not by a logical dependence, that is, such that it cannot be supernaturally separated from them, but only by a natural one, namely, so that it requires that they unite in a composite substance, unless God wills otherwise.”¹⁵ If that substantial bond of monads depends upon monads by at least a natural dependence, I wonder whether or not the Aristotelian definition of accident can be adapted to it, in the way you will find explained by Smiglecius in the page attached to this letter.¹⁶ Certainly a composite substance will be sufficiently constituted by those substantial modes proper to the individual monads. And thus that bond or the realization of the phenomena will be in the composite substance not as a part, but still in such a way that it is impossible to be without it (at least naturally). Therefore, it will be an Aristotelian accident. But since it can supernaturally exist without the composite substance, it is then not a mode; therefore, it will be an absolute accident.

7. *Potest Deus eandem aliis monadibus uniendis applicare, ita ut priores unire desinat, potest etiam ipsam plane tollere, et aliam alias monadas unientem huic substituere idque vel ita ut alias monadas unire desinat et transferatur de monadibus in monadas vel ita ut suas monadas quas naturaliter unit retineat nunc vero supernaturaliter uniat etiam novas.* Haec omnia quae de vinculo substantiali dicis dicam cum proportionem pariter de meo ente realizante phaenomena, et praesupponente substantiam compositam per modos completam.

8. *Et hoc (postremum) videtur dicendum secundum Vestros de mutatione totius substantiae corporis in totam substantiam alterius corporis quod tamen propriam suam naturam retineat.* Dicerem ego consequenter ad ea quae superius dixi, illud quod phaenomena panis realizat manere destructis panis monadibus et applicari monadibus corporis Christi.

9. *Convenies, opinor, accidentia quaedam realia esse non nisi modificationes quae proinde cum ipsa substantia sublata tolluntur.* Convenio.

10. *Sed quaeritur an non sint accidentia quaedam quae sint plus quam modificationes.* Videntur autem haec esse plane superflua, et quidquid ipsius praeter modificationem inest, videtur ad ipsam pertinere rem substantialem. Certum est in sententia astruente corpora (loquor de mathematicis) aliquid esse praeter phaenomena non esse superfluum ens absolutum quod phaenomena illa realizet id ergo tantum quaerendum superest, an realizatio illa sit accidens an substantia. Ego aio esse accidens absolutum, absolutum quidem quia nulla modalitas rerum per se inextensarum et immobilium potest reddere res illas vere extensas et vere mobiles etc. accidens vero quia praesupponit substantiam compositam jam in esse suo constitutam per monadas earumque modos substantiales (de quibus numeris 4. 5. 6.) atque hic valet illud axioma Peripateticorum. Quidquid ex natura sua advenit enti substantialiter constituto et completo est accidens.

11. *Nec video quomodo possimus abstractum distinguere a concreto seu subjecto cui inest aut explicare intelligibiliter quid sit tò inesse vet inhaerere subjecto nisi considerando inhaerens ut modum seu statum subjecti, qui vel essentialis est, nec nisi mutata substantiae natura mutari potest, nec revera ab ea nisi respectu differt vel accidentalis et appellatur modificatio qui nascitur et interit manente subjecto.* Ἐντελέχεια sive vis

7. "God can apply this same thing to unify other monads, so that it stops unifying the previous ones. He can also remove it completely and substitute for it another thing that unifies other monads; and this can be done either in such a way that it ceases to unify the other monads and is transferred from one group of monads to another, or in such a way that it retains its own monads, which it naturally unites, and now also unites new ones supernaturally."¹⁷ All these things that you say about the substantial bond, I shall by analogy equally say about my being that realizes the phenomena and presupposes a composite substance completed by modes.

8. "And (finally) according to your view it seems that this should be said concerning the change of the whole substance of a body into the whole substance of another body, which nonetheless retains its prior nature."¹⁸ I would say, as a consequence of what I said above, that, when the monads of the bread are destroyed, that which realizes the phenomena of the bread remains and is joined to the monads of the body of Christ.

9. "You will agree, I believe, that some real accidents are only modifications, which accordingly are destroyed when the substance itself is destroyed."¹⁹ I agree.

10. "But it is asked whether there are not some accidents that are more than modifications. Yet these seem to be clearly superfluous, and whatever is in these things themselves beyond a modification seems to pertain to the substantial thing itself."²⁰ It is certain that in the judgment covering bodies (I am talking of mathematical bodies) there is something beyond the phenomena, that an absolute entity that realizes these phenomena is not superfluous, and therefore it remains only to inquire whether this realizing thing is an accident or a substance. I myself say that it is an absolute accident: certainly absolute, because no modality of things that are intrinsically unextended and immobile can render those things truly extended and truly mobile, etc., but an accident, because it presupposes a composite substance already constituted in its being by monads and their substantial modes (concerning which see numbers 4, 5, 6[a and b]). Here the following Peripatetic axiom is applicable: whatever occurs by its own nature in a substantially constituted and complete being, is an accident.

11. "I do not see how we can distinguish an abstract thing from a concrete thing, or from the subject in which it is, or explain intelligibly what it is to be in or to inhere in a subject, except by considering inherence as a mode or a state of a subject; and this is either essential, and so cannot be changed unless the nature of the substance is changed and does not really differ from it except in respect; or it is accidental, and called a modification, which can arise and perish while the subject remains."²¹ Entelechy or

activa inest τῷ πρώτῳ ὑποκειμένῳ sive subjecto passivo monadum nec tamen est modus illius subjecti passivi sed aliquid absolutum et plus quam modaliter ab illo distinctum. Potest ergo aliquid concipi inesse quodammodo subjecto etiamsi non concipiatur inhaerens ut modus. Hoc tamen discrimen interest inter ἐντελέχειαν et absolutum accidens nostrum, quod illa constituat substantiam non item hoc. Per *esse in subjecto* quatenus proprium est accidentibus intelligo cum Aristotele: quod in re aliqua inest non tanquam pars, nec potest sejunctum ab eo in quo est consistere. Vide si placet explicationem Smigletii. Hoc totum conveniret absoluto illi realizanti phaenomena, nam imprimis esset in substantia composita, nam denominaret illam intrinsece extensam etc. et dependeret ab illa saltem naturaliter ac exigeret illi uniri deinde non esset pars illius, ut saepius jam dixi, denique impossibile esset illud consistere sine illa saltem naturaliter ergo.

12. *Ais videri Ens medium dari posse inter substantiam et modificationem. Ego vero putem id medium esse ipsum unum per se substantiatum seu substantiam compositam ea enim media est inter substantiam simplicem quae praecipue nomen substantiae meretur et modificationem.* Censeo non tantum inter substantiam simplicem sed etiam inter substantiam compositam, et modificationem medium dari posse nempe ens realizans phaenomena superveniens substantiae compositae substantialiter completae, et monadibus ipsis coaevum, prorsus sicut vinculum tuum substantiale.

13. *Substantia simplex est perpetua, substantiatum nasci et interire potest et mutari.* Non video quomodo substantiatum nasci et interire possit nisi quatenus includit modos substantiales qui soli nasci et interire possunt. His autem admissis nihil necesse est vinculum illud absolutum substantiati constitutionem ingredi.

14. *Accidens non est capax novae modificationis per se scilicet sed tantum per accidens quatenus inest substantiae per alia etiam accidentia modificatae* etc. Largior id esse verum de accidentibus modalibus et corruptibilibus, non item de absolutis et incorruptibilibus quale est meum quod in nihilo fere discrepabit a vinculo TUO substantiali, nisi quod substantiae constitutionem non ingrediatur.

15. *Quaeris merito* (circa explicationem μετουσiasμοῦ instituendam si nulla essent vincula substantia, et substantiata mera essent phaenom-

active force is in the primary substratum or passive subject of the monads, and yet it is not a mode of this passive subject, but something absolute and more than modally distinct from it. Therefore, something can be conceived to be in a subject in a certain manner, even if it is not conceived of as inhering as a mode. But there is this difference between an entelechy and our absolute accident, namely, that the former constitutes a substance but the latter does not. By “being in a subject” (insofar as it is a property of accidents), I understand, with Aristotle, that which is in something not as a part, and which cannot exist apart from that in which it is. Please look at Smiglecius’s explanation.²² This whole [passage] would apply to that absolute thing that realizes the phenomena, for in the first place it would be in composite substance, for it would designate that intrinsically extended thing, etc., and it would depend on it at least naturally and would require it to be unified; further, it would not be a part of it, as I have already frequently said; and, finally, therefore, it would be impossible for it to exist without it, at least naturally.

12. “You say that it seems that there can be a middle being between substance and modification. But I think that this middle being itself is a substantiated per se unity, that is, a composite substance, for this is a middle thing between a simple substance, which chiefly deserves the name ‘substance,’ and a modification.”²³ I think that there can be a middle thing not only between a simple substance and a modification but also between a composite substance and a modification, namely, a being realizing the phenomena and supervening on a composite substance that is substantially complete, and as old as the monads themselves, just like your substantial bond.

13. “Simple substance is perpetual; a substantiated thing can arise and perish, and be changed. . . .”²⁴ I do not see how a substantiated thing can arise or perish except insofar as it includes substantial modes, which alone can arise or perish. But if the latter are admitted, it is not at all necessary that that absolute bond enter into the constitution of a substantiated thing.

14. “An accident is not capable of a new modification, that is, not capable through itself, but only accidentally, insofar as it is in a substance also modified by another accident. . . .”²⁵ I grant that this is true concerning modal and corruptible accidents, but not concerning absolute and incorruptible accidents, such as mine, which will differ hardly at all from your substantial bond, except that it does not enter into the constitution of a substance.

15. “You rightly ask (in connection with the explanation of transubstantiation that would have to be adopted if there were no substantial bonds

ena) *cur dicamus alias monadas prioribus substitutas, aut in quo consistat illa substitutio nec video quomodo id explicari possit eo casu quo nihil in natura ponitur nisi monades et monadum perceptiones, nisi monadibus corporis Christi tribuamus perceptiones respondentes perceptionibus monadum destructarum.* Dixeram illam substitutionem in eo consistere quod Deus perceptiones omnium monadum non destructarum versantes circa monadas destructas conservet intuitu monadum corporis Christi. Id jam variis viis explicare conabor. 1^{mo} multi Theologi cum Suarez docent variationem voluntatis in Deo non semper inferre variationem in natura. Juxta hanc sententiam videtur posse fieri ut conserventur illae priores perceptiones monadum permanentium intuitu monadum corporis Christi symbolice figurandi quamvis nihil in natura poneretur nisi monades et perceptiones, etiamsi monadibus corporis Christi non tribueremus perceptiones monadum destructarum perceptionibus respondentes. Tunc enim voluntas Dei censi poterit sufficiens applicativum perceptionum remanentium ad ipsum Christi corpus sive ejus monadas.—2^o Si altera sententia vera est, scilicet quod omnis varietas voluntatis in Deo inferat varietatem aliquam in creaturis, jam admitti poterunt in monadibus corporis Christi modi accidentales modis itidem accidentalibus monadum destructarum respondentes sive illi modi sint perceptiones sive fundamentum perceptionum nam sicut supra n. 5. substantias compositas constitui per modos substantiales a perceptionibus utpote fluxis distinctos, ita nihil vetat in praesenti hypothesis corporum ad mera phaenomena redactorum concedere modos accidentales distinctos ab ipsis perceptionibus. Quod si tamen hos modos accidentales omnino repudias et solas monades cum suis perceptionibus in natura ponis quod mihi difficile esse videtur. Age sane 3^o tribuamus monadibus corporis Christi perceptiones aliquas respondentes perceptionibus monadum destructarum.

16. *Sed ita dicendum foret accidentia panis fore in corpore Christi quod merito improbatur.* Aloysius Temmick in *Philosophia vera* cujus libri notitiam beneficio TUO adeptus sum pag. 117 asserit accidentia subsistere in corpore Christi. Objicit sibi: hoc posito accidentia illa non erunt panis accidentia sed Christi cui insunt. Respondet negando consequentiam, nam ejus sunt et dicuntur esse, inquit, cujus sunt propria per naturam, vel ait

and substantiated things were mere phenomena)²⁶ why we say that other monads are substituted for the former ones, or in what this substitution consists; and I do not see how this could be explained in this case in which nothing is posited in nature except monads and the perceptions of monads, unless we attribute to the monads of the body of Christ perceptions corresponding to the perceptions of the destroyed monads.”²⁷ I had said that that substitution consists in the fact that God preserves the perceptions belonging to all the monads that are not destroyed which are of the destroyed monads through an intuition of the monads of the body of Christ.²⁸ I shall now try to explain this in various ways. First, many theologians teach along with Suárez that a change of will in God does not always produce a change in nature. In addition to this opinion, it seems that it could happen that the prior perceptions of the enduring monads are preserved through an intuition of the monads of the body of Christ taken symbolically, with nothing assumed in nature except monads and perceptions, even if we should not attribute perceptions to the monads of the body of Christ corresponding to the perceptions of the destroyed monads.²⁹ For then the will of God could be thought to be sufficient for directing the perceptions that remain to the body of Christ itself or to its monads. Second, if the opposite opinion is true, that is, that every change of will in God produces some change in creatures, then accidental modes can be admitted in the monads of the body of Christ corresponding to the similarly disposed accidental modes of the destroyed monads. These modes will be either perceptions or the foundation of perceptions, for just as, according to (5) above, composite substances are constituted through substantial modes distinct from perceptions, inasmuch as the latter are in flux, so nothing prevents us, on the present hypothesis of bodies reduced to mere phenomena, from conceding accidental modes distinct from the perceptions themselves. But if you still entirely reject these accidental modes and posit only monads with their perceptions in nature, which seems difficult to me, then consider a third option: that we attribute some perceptions to the monads of the body of Christ corresponding to the perceptions of the destroyed monads.

16. “But if this were so, it would have to be said that the accidents of the bread were in the body of Christ, which is rightly rejected.”³⁰ Aloysius Temmick asserts on page 117 of *The True Philosophy*,³¹ a book whose acquaintance I gained with your help, that accidents subsist in the body of Christ. He raises the following objection: if this were the case, then those accidents will not be accidents of the bread but of Christ, in whom they exist. He responds by denying the consequence, for he says that the accidents are and are said to be of that to which they belong by nature; or he says that

esse accidentia Christi ut Eucharistice existentis, panis autem ut naturaliter existentis. Ita qui in scena paludamentum gestat a principe commodatum nonne gestat quod principis est proprium, dicit tamen esse suum, ut in scena principem agit. Denique concedit etiam illa accidentia ut individua sunt non esse panis sed ut sunt eadem specie. Porro de individuationibus rerum, inquit, nulla est cognitio sensibilis, nulla proinde quaestio, nulla propositio unde cum sint specie eadem quae ante, rigidissime et propriissime dicuntur absolute esse accidentia panis sicut in Geometria quae eadem specie sunt, simpliciter et absolute eadem asseruntur. Ita Temmick.

Sed et via suppetit eadem individua accidentia conservandi si cum Philosophis Recentioribus asserat quis accidentia utpote phaenomena primario in mente percipientis illa residere, et dicere in recto ipsam cognitionem nostram quae cum individualiter invariata maneat uti supponitur manebunt accidentia invariata nam recto phaenomeni invariato manet simpliciter invariatur phaenomenon. Caeterum accidentia panis in corpore Christi ut in subjecto sustentationis esse communiter docent Scholastici, et eatenus corpus Christi ut illis substans posse denominari *hoc* sed quia non sunt in eo connaturaliter hinc non tribuere denominationem albi sapidi etc. corpori Christi. Sicut si Angelo inquitur uniretur albedo, possem albedinis subjectum designando dicere Angelus est hoc, non tamen possem dicere angelus est albus ob incapacitatem subjecti quod totum accommodari potest cognitioni quam in recto dicerent accidentia.

17. *Neque tò hoc illis corporis Christi monadibus recte tribueremus ex hoc solo quod fuerint causae ideales in mente Dei harum in nobis perceptionum; causae ideales habent rationem causandi alienas perceptiones per suas perceptiones illis respondentes, neque itaque monades corporis Christi causa idealis essent phaenomenorum nostrorum nisi aliquid in se haberent respondens quod causalitatem fundaret id est nisi perceptiones earum tales essent quales fuerant in monadibus panis et vini ut causae tales ideales nostrarum perceptionum atque adeo subjecta accidentium apparentium appellari mereantur. Juxta dicta num. 16 admitti possunt hic*

they are accidents of Christ as a eucharistically existing thing, but accidents of the bread as a naturally existing thing. In this way, doesn't he who wears on stage a military cloak borrowed from a prince wear what belongs to the prince, though he nonetheless says that it is his when he plays the part of the prince on stage? Finally, he also concedes that these accidents are of the bread not insofar as they are individuals but insofar as they are the same in appearance. Further, concerning the individuation of things, he says that there is no sensible cognition, hence no question, no proposition, on the basis of which, since they are the same in appearance as before, they are said most rigorously and properly to be absolutely the accidents of the bread, in the way that in geometry things the same in appearance are asserted to be simply and absolutely the same. Thus Temmick.

But a way of preserving the same individual accidents is also at hand, if someone claims, as modern philosophers do, that accidents, inasmuch as they are phenomena, reside in the first place in the mind of the perceiver and that our cognition itself rightly says which accidents will remain unchanged, since it is supposed that our cognition for its part remains unchanged. For if a phenomenon is rightly said to be unchanged, it remains an unchanged phenomenon without qualification. Furthermore, the Scholastics commonly teach that the accidents of the bread are in the body of Christ as in a supporting subject, and that to this extent the body of Christ insofar as it supports these things can be called "this"; but because the accidents are not in it connaturally, it follows that we cannot attribute the denominations of white, savory, etc. to the body of Christ. In the same way, if whiteness is said to be united to an angel, I could say "This is an angel" when pointing to the subject of whiteness. Still, I could not say that the angel is white, on account of the incapacity of the subject, which as a whole can be accommodated to cognition, and this cognition they would rightly speak of as "accidents."

17. "And we would not correctly attribute the 'this is' to those monads of Christ's body simply from the fact that they were the ideal causes in God's mind of these perceptions in us; ideal causes contain the reason for the causation of other perceptions through their own perceptions that correspond to them. And so the monads of Christ's body would not be the ideal cause of our phenomena, unless they had something corresponding in them that would ground the causality, that is, unless their perceptions were such as had been in the monads of the bread and wine, as ideal causes of this sort of our perceptions, and to this extent they deserve to be called the subjects of apparent accidents."³² Along with the things said in (16),

dicta maxime juxta viam accidentia constituentium primario in cognitione. Itaque corpus Christi quatenus habens perceptiones respondentes perceptionibus panis sustentabit, id est erit causa idealis conservatae cognitionis in mente mea, et hoc sufficiet ut corpus illud indigitari possit *hoc* non tamen denominabitur illa cognitione album, sapidum, quia ad tales denominationes requiritur capacitas subjecti, ad hanc vero requiritur conaturalitas. De caetero causae ideales mihi non videntur habere rationem causandi perceptionum alienarum praecise per perceptiones illis respondentes. Sic enim perceptiones illae in causis idealibus V.G. in Monadibus A existentes, et alienis, scilicet monadum B respondentes essent natura priores perceptionibus alienis atqui Monades B vicissim sunt causae ideales perceptionum existentium in monadibus A per perceptiones suas perceptionibus monadum A respondentes, ergo perceptiones monadum B vicissim essent natura priores perceptionibus monadum A sicque daretur mutua prioritas in eodem genere. Dicendum ergo arbitror causas ideales habere rationem causandi perceptionum alienarum per aliquid aliud quam per perceptiones illis respondentes, puta per modos aliquos accidentales ipsis perceptionibus priores.

Hoc ipsum in hac Hypothesi magnum incommodum censeo, quod vis activa ab ipsa potentia passiva non distingueretur. Et jam in universo nil nisi entia immaterialia fore viderentur. Deinde in eadem hypothesi evanescent omnia argumenta metaphysica, et mathematica infinitatem partium continui probatura, restabuntque sola moralia desumpta ex ratione optimi. Vale Illustrissime Domine et scripti inconcinni prolixitatem pro tua humanitate excusa. Dabam Paderbornae 12 Decembris 1712.

Illustrissimae Dominationi TUAE

Devotissimus

Bartholomaeus Des Bosses

Leibniz to Des Bosses

Reverendissime Pater

Quaeritur quomodo sententia vestra περὶ τοῦ μετουσιασμοῦ explicari possit, tum secundum Hypothesin merarum Monadum, tum secundum Hypothesin substantiarum compositarum. Secundum priorem Hypothesin quaeritur in quo consistat substantia corporis compositi: an in monadibus,

these things can be admitted completely along with a way of identifying accidents in the first place in cognition. Thus, the body of Christ will endure insofar as it has perceptions corresponding to the perceptions of the bread, that is, it will be the ideal cause of the cognition preserved in my mind; and this will suffice for that body to be proclaimed “this.” Nonetheless, it will not be denominated “white” or “savory” by this cognition, since a capacity of the subject is required for such denominations; in fact, connaturalness is required for this. Furthermore, ideal causes do not seem to me to contain the reason for the causation of other perceptions just by means of perceptions corresponding to them. For in this way those perceptions in the ideal causes, for example, those existing in monads A and corresponding to others, namely, of monads B, would be prior by nature to the other perceptions; and monads B in turn are the ideal causes of the perceptions existing in monads A by means of their perceptions corresponding to the perceptions of monads A; therefore, the perceptions of monads B in turn would be prior by nature to the perceptions of monads A, and so there would be a mutual priority in the same kind of thing.³³ Therefore, I think it should be said that ideal causes contain the reason for the causation of other perceptions by means of something other than perceptions corresponding to them—imagine that it is by means of some accidental modes prior to the perceptions themselves.

I think it is a great disadvantage of this hypothesis that active force would not be distinguished from passive force. As a result, there would seem to be nothing in the universe except immaterial beings. Thereafter, on the same hypothesis, all the metaphysical and mathematical arguments to prove the infinity of the parts of the continuum disappear, and there will remain only moral arguments taken from the principle of the best.

Farewell, most distinguished Sir, and in your humanity excuse the proximity of this inelegant letter. From Paderborn, 12 December 1712.

Your Excellency’s most devoted
Bartholomew Des Bosses

57. Leibniz to Des Bosses¹

[Vienna, 24 January 1713]

Most Reverend Father,

You ask how the opinion of your order concerning transubstantiation can be explained, both according to the hypothesis of mere monads and according to the hypothesis of composite substances. According to the first hypothesis, it is asked in what consists the substance of a composite

an vero in ipsis phaenomenis. Id est quaeritur (exempli causa) an anima vermis in corpore hominis existentis sit pars substantialis humani corporis, an vero nudum requisitum, et quidem non metaphysicae necessitatis, sed quod in cursu naturae requiratur, quod ego malim. Quod si prius statuitis, utique dicendum est monades panis et vini tolli, et monades Corporis Christi earum esse loco. Sin vero monades non sint pars substantialis corporum, et composita sint mera phaenomena; dicendum foret corporum substantiam consistere in phaenomenis veris, quae nempe ipse Deus in ipsis per Scientiam visionis percipit, itemque angeli et beati, quibus res vere videre datum est. Itaque Deum cum beatis percipere Corpus Christi, ubi nobis panis et vinum apparet.

Quodsi vulgarem sequamur Hypothesin, de substantiis corporeis, vel compositis, dicerem (ut jam praecedente Epistola mentem meam exposui) Vinculum substantiale seu additum Monadibus substantiale, quod substantiam compositam formaliter constituit, et phaenomena realisat, mutari, salvis monadibus, quia ut dixi Anima vermiculi non est de substantia corporis in quo est vermiculus, nec multiplicanda sunt miracula praeter necessitatem. Vinculum substantiale superadditum Monadibus, mea sententia est absolutum quoddam, quod etsi in naturae cursu accurate respondeat monadum affectionibus, nempe perceptionibus et appetitionibus, ita ut in Monade legi possit cui corpori corpus ejus insit; supernaturaliter tamen vinculum substantiale potest esse a Monadibus independens, et manentibus prioribus monadibus mutari, et aliis Monadibus accommodari. Ita monades panis et vini omni vinculo substantiali carerent, re quoad ipsas reducta ad statum Hypotheseos merarum Monadum. Accidentia autem panis et vini seu phaenomena manebunt, sed non in corpore Christi tanquam in subjecto. Idque etiam Theologorum Doctrinae convenit, ne album et rotundum coli dicatur, quod annoto ad numerum 16 Epistolae Tuae nuperae, ubi etiam non video quomodo albedo uniri possit angelo, nisi fiat albus, vel album ei uniatur. Porro vincula substantialia videris num. 5 et alibi in Epistola Tua, aliter quam a me fit accepisse, quasi ego, dum ea pro entibus absolutis habeo, semper inde ab initio creationis extitisse putem. Sed mea sententia, admissis substantiis corporeis seu vinculis substantial-

body, whether in monads or rather in the phenomena themselves. That is, it is asked (for example) whether the soul of a worm existing in a human body is a substantial part of the human body, or whether it is instead a mere requisite—not indeed by a metaphysical necessity, but rather because it is required in the course of nature, as I should prefer. If you choose the former, it should certainly be said that the monads of the bread and wine are destroyed and that the monads of Christ's body take their place. Yet if monads are not a substantial part of bodies, and composites are mere phenomena, then it would have to be said that the substance of bodies consists in true phenomena, namely, those that God himself perceives in them through knowledge of vision, and likewise angels and the blessed, to whom it is given to see things truly. And thus, God, with the blessed, perceives the body of Christ, when bread and wine appear to us.

If, on the other hand, we follow the common hypothesis concerning corporeal or composite substances, I should say (as I have already explained my opinion in an earlier letter) that the substantial bond or substantial addition to monads, which formally constitutes the composite substance and realizes the phenomena, is changed, with the monads preserved, since, as I have said, the soul of a little worm does not belong to the substance of the body that contains the worm, and we should not multiply miracles beyond necessity. A substantial bond superadded to monads is, in my opinion, something absolute, which although it accurately corresponds in the course of nature to the affections of monads, namely their perceptions and appetitions, so that in a monad it can be read in which body its body is, nevertheless, supernaturally, the substantial bond can be independent of the monads and can be changed and accommodated to other monads, with the previous monads remaining. In that case, the monads of the bread and the wine would be without any substantial bond, the matter being reduced (so far as they are concerned) to the stated hypothesis of mere monads. The accidents of the bread and wine,² that is, the phenomena, will remain, but not in the body of Christ, as though in a subject. And this also agrees with theological doctrine, lest it be said that white and round are worshipped (which I note in number 16 of your recent letter), whereas I do not even see how whiteness could be united with an angel, unless it becomes white or something white is united with it. Furthermore, in number 5 and elsewhere in your letter, you seem to have understood substantial bonds differently than I do, as if I, when I regard them as absolute beings, thereby think that they have always existed since the beginning of creation. In my opinion, however, if corporeal substances or substantial bonds are admitted, it should be granted that they are subject to

ibus, fatendum est ea generationi et corruptioni subjacere. Nullam etiam novi Monadum modificationem vel substantialem vel accidentalem, quae constituat substantiam compositam, prout rem accepisse videris numero Tuo sexto. Nec quicquam in monadibus agnosco nisi perceptiones et appetitiones. Vinculum quod substantiam compositam facit, nolim appellare Accidens absolutum quia mihi omne absolutum est substantiale. Quod si accidens inde facere velis, lis erit de nomine incongrua tamen locutio erit, substantiam compositam per accidentalia constitui. Cum Smiglecius Aristotelem secutus dicat, accidens non esse sine subjecto, ostendit Ens absolutum a se non admitti. Nolim enim Ens realisans phaenomena distinguere a vinculo substantiali, ut facere videris n° 7, haec duo enim mihi revera sunt idem, et dicendum est nasci ea et interire. Positis ergo substantiis composites mihi incomparabiliter facilius videtur, et Convenientius destruere Ens realisans phaenomena, servatis monadibus, quam contra ut videris malle n° 8.

Modificationes unius Monadis sunt causae ideales modificationum alterius Monadis (de quo agis n° 17) quatenus in una Monade apparent rationes quae Deum ad modificationes in alia monade constituendas ab initio rerum moverunt.

Infinitudo continui physici in Hypothesi merarum monadum non tam penderet ex ratione optimi, quam ex principio rationis sufficientis, quia nulla est ratio limitandi seu finiendi, sive alicubi sistendi. Continuum vero Mathematicum consistit in mera possibilitate, ut numeri; ideo in eo necessaria est infinitudo ex ipsa ejus notione.

Caeterum miraberis R^{me} Pater, ubi me videbis has literas Vienna Austriaca dare. Illuc usque excurrendi animum sumsi, cum in Thermis Carolinis nuper apud Magnum Russorum Monarcham evocatus egi. Medium enim jam itineris confeceram. Haerebo hic donec tempestas anni molliatur, inde bono cum Deo domum redire spero. Caeterum intelligo et fasciculum a TE venisse, quem in reditum meum differri oportet, nisi remitti velis. Quod superest vale et fave. Dabam Viennae Austriacae 24 Januar. 1713.

Deditissimus

Godefridus Guilielmus Leibnitius

generation and corruption. I have also acknowledged no modification of monads, either substantial or accidental, that might constitute a composite substance, as you seem to have assumed in your number 6[a and b]; nor do I recognize anything in monads except perceptions and appetitions. I am unwilling to call the bond that produces a composite substance an absolute accident, since for me every absolute is substantial. If you want to make an accident out of this, the quarrel will be over a name; nevertheless, it will be an awkward way of speaking to say that a composite substance is constituted through accidents. When Smiglecius, a follower of Aristotle, says that no accident is without a subject, he shows that he does not admit an absolute being. I am also unwilling to distinguish a being realizing phenomena from a substantial bond, as you seem to do in number 7. For these two things are in truth the same for me, and it should be said that they arise and perish. If composite substances are assumed, therefore, it seems to me incomparably easier and more fitting to destroy a being realizing phenomena, while preserving the monads, than vice versa, as you seem to prefer in number 8.

The modifications of one monad are the ideal causes of the modifications of another monad (as you discuss in number 17), insofar as reasons appear in one monad which, from the beginning of things, prompt God to produce modifications in another monad.

On the hypothesis of mere monads, the infinity of the physical continuum would not depend so much on the principle of the best as on the principle of sufficient reason, since there is no reason for limiting or ending, or stopping anywhere. But a mathematical continuum consists in mere possibility, like numbers; thus, an infinity is necessary in it as a result of its very concept.

On other matters, you will be surprised, Most Reverend Father, to see that I am sending this letter from Vienna, Austria. I decided to travel on to here, since, having recently gone to Carlsbad in response to a summons from the great monarch of Russia,³ I had already completed half the journey. I shall remain here until the season improves; then, by the goodness of God, I hope to return home. Finally, I understand that a package has also arrived from you.⁴ It will have to be put off until my return, unless you would like it sent back.

For the rest, farewell and think kindly of me. From Vienna, 24 January 1713.

Most faithfully,

Gottfried Wilhelm Leibniz

[Notes on Des Bosses's letter of 12 December 1712]

anders und kürzer gefaßt

Ad Epistolam R. P. Des Bosses 12 decembris datam haec noto: Ad (1) objicitur, Monades esse magnam imo potissimam partem substantiae corporis, v.g. panis et vini. Respondeo positis substantiis compositis hoc a me non admitti: anima vermis in corpore hominis existentis meo iudicio pars substantialis humani corporis non est, sed requisitum, non quidem metaphysicae necessitatis, quia substantia corporea seu composita manente tolli, vel sublata manere possunt Animae; sed physicae tamen, ut scilicet ordine naturae exigatur ejus existentia. Fateor Deum potuisse habere rationes nobis ignotas etiam Monades tollendi; cum substantia compositi seu panis et vini tollitur; sed huc sine ratione confugere non oportet nec multiplicare miracula praeter necessitatem.^{L1}

Ad (2) ipsum praecise vinculum substantiale additum, detractum, mutatum, nihil mutat in Monadum modificationibus; in cursu quidem naturae vincula substantialia seu substantiae corporeae accurate modificationibus monadum respondent. At supernaturaliter Deus monades ad eum statum reducere potest, qui foret si haberet locum Hypothesis de solis Monadibus existentibus, sine ullis substantiis compositis. Ita sublatum esset vinculum nulla monadum mutatione facta.

Ad (3) Naturaliter in phaenomenis internis alicujus Monadis perfectis-

L1. DELETED: | Ad 2 naturaliter in phaenomenis internis alicujus monadis perfectissime repraesentatur vel exprimitur utrum ipsa sit ingrediens requisitum Corporis alterius monadis dominantis, vel aggregati ob harmoniam inter corpora et animas. Sed supernaturaliter haec expressio vel repraesentatio limitari ac temperari potest: nec certum est quamlibet monada debere exprimere quicquid in universo fit miraculose; praesertim per miraculum transitorium quale est de quo hic agitur. Itaque posset novum vinculum substantiale Monadum sublato priore panis et vini esse id quod constituit corpus Christi, etsi monades ipsae panis et vini manerent, et ad hoc corpus non pertinerent; omnique vinculo substantiali carerent. Aggregatio Monadum per se, praeciso vinculo substantiali est accidens Substantiae corporeae seu compositi, in vinculo substantiali formaliter consistentis. Est tamen accidens, quod haec substantia naturaliter exigit, ut vulgo dicitur de Extensione, quod eam corpus naturaliter exigit.

(3) Admissis substantiis compositis, omnino dicendum est aliquid absolutum nasci et tolli. Et vinculum substantiale monadum ad Equum Concurrentium, seu substantia singularis equi coepit et interiit. |

[Notes on Des Bosses's letter of 12 December 1712]⁵

I note these points with respect to the Reverend Father Des Bosses's letter dated 12 December. With respect to (1), it is objected that monads are a great, even the most important, part of the substance of body, for example, of bread and wine. I respond that, with composite substances assumed, this is not admitted by me: the soul of a worm existing in a human body is not, in my opinion, a substantial part of the human body, but a requisite—not indeed by a metaphysical necessity, since the souls can be destroyed while the composite or corporeal substance remains, or the souls can remain while the composite or corporeal substance is destroyed; but nonetheless by a physical necessity, so that its existence is in fact required by the order of nature. I admit that God could have had reasons unknown to us for destroying even monads, when the substance of the composite, that is, the bread and wine, is destroyed; but it is not proper to take refuge in this without reason or to multiply miracles beyond necessity.^{L1}

With respect to (2), the addition, subtraction, or change of just the substantial bond itself changes nothing in the modifications of monads. To be sure, in the course of nature, substantial bonds or corporeal substances accurately correspond to the modifications of monads. But supernaturally God can restore monads to this state, which he would do if the hypothesis of monads existing alone, without any composite substances, held. Thus, the bond would be destroyed, while no change occurred in the monads.

With respect to (3), it is naturally represented or expressed most per-

L1. DELETED: | With respect to 2, it is naturally represented or expressed most perfectly in the internal phenomena of any monad whether it itself is an ingredient requisite of a body that another monad dominates, or of an aggregate, on account of the harmony between bodies and souls. But supernaturally this expression or representation can be limited or qualified: it is not in any way certain that monads ought to express whatever happens in the universe miraculously, especially through a transitory miracle, such as the one in question here. And so, with the previous substantial bond of the bread and wine destroyed, there could be a new substantial bond of the monads that would constitute the body of Christ; although the monads themselves of the bread and wine would remain, they would not pertain to this body, and they would lack any substantial bond. An aggregation of monads by itself, with the substantial bond destroyed, is an accident of corporeal or composite substance, which consists formally in a substantial bond. Nevertheless, it is an accident that this substance naturally requires, as is commonly said of extension, because a body naturally requires it.

(3) With composite substances admitted, it should certainly be said that something absolute arises and perishes. And the substantial bond of the monads concurring in a horse, or the individual substance of the horse, begins and ends. |

sime repraesentatur vel exprimitur, utrum ipsa sit requisitum ingrediens corporis cui alia Monas dominatur; Et si vermis alicujus corpus est pars corporis humani, hoc legi poterit in anima vermis, secundum cursum scilicet naturalem. Idque ipsa exigit harmonia praestabilita corporis et animae Sed ex vestris hypothesibus dicendum erit, supernaturaliter hanc expressionem vel repraesentationem limitari ac temperari posse, ita ut vinculum aliquod substantiale monadibus adimi possit licet modificationibus ipsarum non mutatis, quia praecise et formaliter unum ab altero est independens, vinculum nempe, seu substantia composita, a monadibus earumque modificationibus. Ita Monas non exprimet, quidquid in universo fit miraculose; praesertim cum miraculum est transitorium quale id de quo agitur ubi omnia post corruptionem specierum ad priorem modum rediguntur, quasi miraculum non intervenisset. Itaque sublato vinculo substantiali, seu substantia panis et vini, posset novum substitui, nempe id quod constituit substantiam corporis Christi; idque existet eodem loco ubi prius fuit substantia panis et vini, sed non est vinculum substantiale Monadum panis et vini, quae jam omni vinculo substantiali carent. Accidentia autem panis et vini, sive sint realia accidentia (seu vinculum accidentiale monadum) sive mera phenomena resultantia, manebunt.

Ad (4) Nego vinculum substantiale monadum equinarum ab initio creationis extitisse, nego etiam absolutum nullum nasci vel interire. Hoc quidem verum foret, secundum hypothesin quod nil sit nisi Monades; sed falsum erit admissis substantiis compositis seu vinculis substantialibus, quae utique nascuntur et intereunt.

(Ad 5) Nihil aliud admitto in Monadibus quam perceptiones, et tendentiam ad novas perceptiones nec ulla unquam fit naturaliter substantialis mutatio in monadibus. Novae perceptiones jam ex prioribus colligi poterant.

Ad (6a) Ego per vinculum substantiale, quod constituit substantiam compositam, non intelligo aliquam monadum modificationem, aut modum earum vel substantialem vel accidentialem; neque enim quicquam agnosco, quod hoc praestet, sed absolutum aliquod superadditum monadibus, quod tamen earum perceptionibus in ordine naturae consentit ac perfecte respondet. Objectiones videntur ponere multa, quae plane abluunt a mente mea. Nempe ut dixi nullos Monadum modos novi nisi perceptiones et appetitus seu tendentias ad novas perceptiones; et per has so-

fectly in the internal phenomena of any monad whether it itself is an ingredient requisite of a body that any other monad dominates; and if the body of any worm is a part of the human body, this could be read in the soul of the worm, to be sure, in accordance with the natural course of things. And the preestablished harmony of body and soul itself requires this. But on your hypothesis it will have to be said that supernaturally this expression or representation could be limited or qualified, so that some substantial bond could be taken away from the monads, provided that their own modifications were not changed, since precisely and formally the one is independent of the other; that is, the bond or composite substance is independent of the monads and their modifications. Thus, a monad will not express whatever happens in the universe miraculously, especially when the miracle is transitory, such as the one in question, whereby after the appearances have changed everything is returned to the previous state, as if no miracle had occurred. And so, with the substantial bond, or the substance of the bread and wine, destroyed, a new thing could be substituted, namely, that which constitutes the substance of Christ's body; and this will exist in the same place where earlier there was the substance of the bread and wine, but it is not the substantial bond of the monads of the bread and wine, which now lack any substantial bond. Nevertheless, the accidents of the bread and wine will remain, either as real accidents (or an accidental bond of monads) or as mere resultant phenomena.

With respect to (4), I deny that the substantial bond of the monads of a horse has existed since the beginning of creation; I also deny that no absolute thing can arise or perish. This indeed would be true according to the hypothesis that there is nothing except monads, but it will be false if composite substances or substantial bonds, which certainly arise and perish, have been admitted.

With respect to (5), I admit nothing else in monads except perceptions and the tendency to new perceptions; nor does any substantial change ever occur naturally in monads. New perceptions could have been deduced already from prior ones.

With respect to (6a), by a substantial bond, which constitutes a composite substance, I do not understand some modification of monads or a mode—either substantial or accidental—of them. For I recognize nothing that might furnish this except something absolute superadded to monads, which nevertheless agrees and corresponds perfectly with their perceptions in the order of nature. The objections seem to assume many things that are clearly at odds with my view. For, as I have said, I acknowledge no modes of monads except perceptions and appetites, or tendencies to new

las fit ut Animae seu Monades alterae alteris subordinentur repraesentative scilicet, nullo inter eas reali influxu.

Ad (6b) Nescio quid tibi velint illi modi substantiales Monadum, singulis monadibus proprii. Nihil tale a me admittitur, aut admitti potest. Substantia ergo composita formaliter non constituitur per aliquam modificationem Monadum, sed per novum absolutum additum. Et hoc ni fallor admittere debent omnes, qui admittunt simul Monades et substantias compositas. Hanc rem quae formalem rationem substantiae compositae constituit, appellare Accidens absolutum, est tollere substantias compositas, et omnia composita facere Entia accidentaliter: sed fortasse lis tantum de nomine erit; mihi enim omne Ens absolutum est substantia. Smiglecius explicatio substantiae et accidentis mihi non obstat. Nam substantia composita (si eam semel admittas) non est in Monadibus tanquam in Subjecto, et potest esse sine monadibus saltem supernaturaliter. Cum tamen Smiglecius Aristotelem secutus petit impossibile esse ut accidens sit sine subiecto, apparet etiam Aristotelem non admittere Accidentia absoluta. Itaque miror mihi objici quae plane me non feriunt; Ut inde agnoscam, me in mente mea exponenda nuper non satis felicem fuisse.

Ad (7). Nescio quid sit Ens realizans phaenomena, nisi hoc ipsum quod ego voco substantiam compositam, seu vinculum substantiale.

Ad (8) Ni fallor incomparabiliter commodius et facilius est destrui Ens realizans phaenomena salvis monadibus, quam contra. Cum Ens realizans phaenomena sit Ens temporalium, quod nascitur et perit, Monas autem sit Ens perpetuum.

Ad (9) nihil habeo quod notem.

Ad (10). per me licet Accidens absolutum vocet aliquis quod ego voco substantiam compositam. Differemus enim in hoc solis verbis non intellectu.

Ad (11). Entelecheia seu vis activa proprie loquendo inest Monadi, et est ejus attributum essentiale ut ratio hominis. At Ens realizans phaenomena mihi nihil differt a substantia composita, ut jam dixi.

Ad (12) Ens realisans phaenomena distinguens a substantia composita, videtur mihi multiplicare Entia praeter necessitatem.

Ad (13) Substantiatum seu substantia composita realizans phaenomena, per se nascitur et interit, non per ullos alterius rei modos substantiales, quales nullos novi.

perceptions; and through these alone it happens that souls or monads are subordinated to one another—that is, subordinated representatively, with no real influx between them.

With respect to (6b), I do not know what you mean by those substantial modes of monads proper to individual monads. Nothing of this sort is admitted, or could be admitted, by me. Therefore, composite substance is formally constituted not through any modification of monads, but through a newly added absolute [being]. And, unless I am mistaken, everyone should admit this who admits both monads and composite substances. To call the thing that constitutes the formal reason of a composite substance an absolute accident is to destroy composite substances and to make all composites accidental beings. But perhaps the quarrel will be only about a name; for me, every absolute being is a substance. Smiglecius's explanation of substance and accident is not opposed to mine. For composite substance (if you once admit this) is not in monads as in a subject, and it can exist without monads, at least supernaturally. Nevertheless, when Smiglecius, a follower of Aristotle, claims that it is impossible for an accident to be without a subject, it appears that Aristotle, too, would not admit absolute accidents. Thus, I am surprised that objections are brought against me that clearly miss their mark; as a result I recognize from this that I have not been entirely successful in explaining my position recently.

With respect to (7), I do not know what a being realizing phenomena is except that very thing that I call a composite substance or substantial bond.

With respect to (8), unless I am mistaken, it is incomparably more fitting and easier that a being realizing phenomena be destroyed, with the monads preserved, than vice versa. For a being realizing phenomena is a transitory being, which arises and perishes, but a monad is a perpetual being.

With respect to (9), I have nothing to note.

With respect to (10), as far as I am concerned, what I call a composite substance, someone else may call an absolute accident. For in this we shall differ in words alone, not in what is understood.

With respect to (11), strictly speaking, entelechy, or active force, is in the monad and is its essential attribute, as reason is that of a human being. But for me a being realizing phenomena does not differ from a composite substance, as I have already said.

With respect to (12), distinguishing a being realizing phenomena from a composite substance seems to me to multiply beings beyond necessity.

With respect to (13), a substantiated thing or a composite substance realizing phenomena arises and perishes through itself, not through any substantial modes of any other thing, for I acknowledge no such modes.

Ad (14) Absolutum illud realisans phaenomena non est incorruptibile, non magis quam vinculum meum substantiale. Nec quicquam video in quo differant.

Ad (15) Verum est Deum perceptiones quae respondent destructae panis et vini substantiae in aliis monadibus conservare posse id enim fit eo ipso dum ordinarium in iis naturae cursum conservat. Sed quaeritur in quo consistat destructa panis et vini substantia? Sane si solae sint Monades, nullae autem substantiae compositae, nullum Ens phaenomena realisans fateor aut improprie pani et vino tribui substantiam cum sint mera phaenomena; aut si propria in illis substantia quaeritur eam quaerendam esse in Monadibus ipsis et ita non posse a vobis evitari Monadum destructionem, quod tamen maluissem. Non video quod sibi velint modi accidentales monadum distincti a perceptionibus et appetitionibus.

Ad (16) dicendum est accidentia panis non esse in Corpore Christi ne album, rotundumque colatur. Non video quomodo Albedo uniri possit angelo, nisi fiat albus aut nisi aliquod album ei uniatur.

Ad (17) Modificationes unius monadis sunt causae ideales modificationum alterius monadis, quatenus in una Monade apparent rationes quae Deum ad modificationes in alia monade constituendas ab initio rerum moverunt.

Ad (18) *Infinitas* partium continui, physici non tam pendet ex ratione optimi quam ex principio rationis sufficientis quia nulla est ratio limitandi seu finiendi aut alicubi sistendi. Continuum vero mathematicum consistit in pura possibilitate ut numeri; ideo in eo necessaria est infinitas. *Hypothesis merarum monadum* hoc habet egregii quod ea posita nihil superest in-explicatum, nec quicquam ponitur nisi comprobatum et necessario ponendum. FINIS

[Supplementary Study]

Cognoscibilia sunt incomplexa vel complexa.

Incomplexa sunt categorematica seu Termini, vel syncategoremata, vel ex his conflata.

Termini sunt significationes vocabulorum in recto.

Syncategoremata sunt significationes particularum.

Conflata ex his sunt terminorum inflexiones, dum scilicet ex termino et

With respect to (14), that absolute thing realizing phenomena is no more incorruptible than my substantial bond. Nor do I see any way in which they differ.

With respect to (15), it is true that God could preserve in other monads the perceptions that correspond to the destroyed substance of the bread and wine, for that will happen by the very fact that he preserves in them the ordinary course of nature. But it is asked in what consists the destroyed substance of the bread and wine. Certainly, if there were monads alone, but no composite substances, no being realizing phenomena, I grant that it would be inappropriate to attribute substance to the bread and wine, since they would be mere phenomena; alternatively, if it were appropriate to ask for the substance in them, this should be sought in the monads themselves, and so you cannot avoid the destruction of monads, which I still should have preferred. I do not understand what you mean by accidental modes of monads distinct from perceptions and appetitions.

With respect to (16), it should not be said that the accidents of the bread are in the body of Christ, lest white and round be worshipped. I do not see how whiteness could be united with an angel, unless it becomes white or unless something white is united with it.

With respect to (17), the modifications of one monad are the ideal causes of the modifications of another monad, insofar as reasons appear in one monad which, from the beginning of things, prompt God to produce modifications in another monad.

With respect to (18), the infinity of the parts of the physical continuum does not depend so much on the principle of the best as on the principle of sufficient reason, since there is no reason for limiting or ending, or stopping anywhere. But a mathematical continuum consists in pure possibility, like numbers; thus, an infinity is necessary in it. The *hypothesis of mere monads* has this distinction, that, with it assumed, nothing remains unexplained, nor is anything assumed except what is proven and what must be assumed necessarily. THE END

[Supplementary Study]

Things that can be known are simple or complex.

*Simples*⁶ are categorematic, that is, terms, or syncategorematic, or compounded from these.

Terms are the significations of words in the nominative case.

Syncategoremata are the significations of particles.

Compounded from these are the inflections of terms, namely, when

particula fit compositum obliquum, v.g. cum dico, hominis; quod idem est ac τοῦ homo, ubi τοῦ est particula, Homo terminus.

Termini sunt vel impossibiles vel possibiles.

Termini possibiles sunt Entia realia. Impossibiles sunt Entia rationis.

Interim aliud sunt Termini quam Entis, v.g. Triangulum et Trilaterum sunt idem Ens, sed sunt termini diversi differuntque formaliter non materialiter. Sic reduplicativi, veluti homo quatenus est scientiae capax, non est res alia quam homo, sed alius terminus.

Termini igitur sunt mere reales vel connotionales. Termini Reales sunt ipsae Res, cum nihil exprimitur praeter ipsam; connotionales sunt res cum addito, v.g. Homo est Terminus mere realis, Homo rationalis est terminus connotionalis essentialis, et est in eo superfluitas, quia pars una ex alia sequitur. Homo doctus est terminus connotionalis accidentalis. Idem enim nunc est doctus, nunc indoctus, manetque eadem res, sed accidentibus variata. Quodsi conciperemus, idem Ens posse esse nunc hominem nunc [non-]hominem, etiam homo foret terminus connotionalis accidentalis. Sic quadratum non est terminus realis, nam potest aliquid ex non-quadrato fieri quadratum, et dantur quadrata diversissimae naturae, velut aureum, argenteum, etc. Sic doctus est terminus connotionalis, non enim datur certum genus Entis, quod nil sit nisi doctum, aut docti modificationes.

Termini sunt Concreti vel Abstracti.

Concreti mere reales sunt Substantiae.

Concreti connotionales sunt essentialis aut accidentales ut jam dixi.

Abstracti sunt itidem aut Entia, aut praedicata. Sic Virtus est Ens; rationalitas non est Ens.

Abstracta quae sunt Entia, sunt absoluta aut relationes. Relationes nullius propriae mutationis sunt capaces, sed resultant ex absolutis. Videamus an praestet Relationes remove a numero Entium.

Absoluta sunt Formae quae sunt Entia durabilia, et transitiones (id est Actiones vel passionis), seu accidentia successiva.

Sunt autem Formae aliae Essentiales, seu constitutivae, aliae accidentales.

Sed fortasse formis essentialibus careri potest ut sint nudae notiones.

from a term and a particle an oblique composite is made, for example, when I say, "a man's," which is the same as "of a man," where "of" is the particle, and "man" is the term.

Terms are either impossible or possible.

Possible terms are real beings; impossible terms are beings of reason.

Nevertheless, terms are different from beings; for example, a triangle and a trilateral are the same being, but they are different terms and they differ formally, not materially. The same holds for reduplicative terms, just as a man insofar as he is capable of knowledge is not a different thing from a man, but is a different term.

Terms, then, are either purely real or connoting.⁷ Real terms are the things themselves, since nothing is expressed besides the thing; connoting terms are things with an addition. For example, "man" is a purely real term, "rational man" is an essential connoting term, and there is an excess in it, since one part follows from another part. "Educated man" is an accidental connoting term, for the same thing at one time is educated and at another time uneducated, and it remains the same thing, but is varied in respect of accidents. But if we should conceive that the same thing can be at one time human and at another time nonhuman, then "man" would be an accidental connoting term. Thus, "square" is not a real term, for something can become square from being nonsquare, and there are squares of very different natures, such as a gold square, a silver square, etc. In the same way, "educated" is a connoting term, for there is no definite type of being that is nothing but educated, or modifications of educated.

Terms are concrete or abstract.

Purely real concrete terms are substances.

Concrete connoting terms are essential or accidental, as I have already said.

Abstract terms are likewise either beings or predicates. Thus virtue is a being, rationality is not a being.

Abstract terms that are beings are absolute or relations. Relations are not capable of any change of their own; instead, they result from absolute beings. We shall see whether it is preferable to remove relations from among the class of beings.

Absolute terms are forms, which are enduring beings, and changes (that is, actions or passions), which is to say, successive accidents.

However, some forms are essential, or constitutive, others are accidental.

But essential forms can probably be eliminated, as they are mere concepts.

Praedicata Abstracta quae non sunt Entia, sunt vel essentialia, (nempe attributa vel affectiones; attributa, primitiva; affectiones, derivativae) vel Accidentalialia qualia sunt relationes accidentales.

Sunt et abstracta composita, v.g. animal-rationalitas, id est animalitas rationalitas, id est humanitas.

Interdum oblique conjunguntur, et Unum abstractum est alterius accidens, ut cum dicitur v.g. doctrina salutifera, ubi salutiferum esse est accidens doctrinae.

Dantur scilicet accidentia accidentium, etsi non dentur substantiae substantiarum. Id est potest substare accidens accidenti, non substantia substantiae.

Cum abstracta non sunt Entia, reducuntur ad veritates, verb. gr. Rationalitas hominis, nihil aliud est quam veritas hujus Ennuntiationis: homo est rationalis. Unde patet incomplexa saepe fundari in ipsis complexis. Quae tamen per se natura posteriora sunt ipsis incomplexis, quorum scilicet faciunt nexum.

Et revera omnis propositio seu omne complexum potest vicissim reduci ad incomplexum per *est* primi Adjecti ut vocant. Ut si loco propositionis: homo est rationalis, dicam tò Hominem esse rationalem, est. Rosam esse odoratam, est. Nempe est verum, etsi forte non existat rosa ut in hyeme.^{L2}

Complexa seu propositiones sunt absolutae vel hypotheticae, vel ex his conflatae.

Absolutae, ut homo est beabilis; hypotheticae, veluti si homo est beabilis, sequitur quod anima ejus sit immortalis; nam in hac vita nulla est vera beatitudo.

Propositiones omnes rursus sunt rationis vel facti, Rationis, veluti homo est beabilis; Facti, omnis homo meretur damnari, hoc scilicet casu factum est, per peccatum.

Omnes propositiones universales reduci possunt ad hypotheticas, veluti omnis homo est beabilis, idem est ac si dicas: si quis est homo, sequitur quod sit beabilis. Vicissim hypotheticae reduci possunt ad absolutas, eo

L2. IN MARGIN: Uti omnis terminus dicit possibilitatem, ita omnis propositio dicit veritatem. Et tamen ut Terminus dividi potest in possibilem et impossibilem, ita propositio in veram et falsam. Nempe Terminus vel propositio tunc falso dicit, quod dicit. Hinc patet etiam quomodo omnis Terminus incomplexus concipi possit ut involvens aliquid complexi, quatenus affirmat possibilitatem.

Abstract predicates that are not beings are either essential (namely attributes or affections; attributes are primitive, affections derivative) or accidental, such as accidental relations.

There are also compound abstract predicates, for example, animal-rationality, which is to say, animality rationality, that is, humanity.

Sometimes they are joined obliquely, and one abstract predicate is an accident of another, as when we say, for example, "salutiferous teaching," where to be salutiferous is an accident of teaching.

There are, of course, accidents of accidents, although there are not substances of substances; that is, an accident of an accident can subsist, but not a substance of a substance.

Since abstract predicates are not beings, they are reducible to truths,⁸ for example, the rationality of a man is nothing but the truth of this proposition: "Man is rational." From this it is evident that simple terms are often based on complex terms, which nevertheless are posterior in nature to the simples themselves, namely, those between which they make a connection.

And, in fact, every proposition, or every complex term, can be reduced, in turn, to a simple term through the "is" of the first predication, as it is called.⁹ Accordingly, in place of the proposition "Man is rational," I may say "Man's being rational, is." "A rose's being fragrant, is." For certainly this is true, even if by chance a rose does not exist, as in winter.^{L2}

Complex terms, or propositions, are absolute or hypothetical, or compounded from these.

Absolute propositions, such as "Man is capable of blessedness"; hypothetical propositions, such as "If man is capable of blessedness, it follows that his soul is immortal"; for in this life there is no true blessedness.

All propositions, in turn, are of reason or of fact: of reason, such as "Man is capable of blessedness"; of fact, "Every man merits being damned," this of course being the case as a result of sin.

All universal propositions can be reduced to hypothetical propositions, just as "Every man is capable of blessedness" is the same as saying "If someone is a man, it follows that he is capable of blessedness." On the

L2. IN MARGIN: Just as every term states a possibility, so every proposition states a truth. And yet terms can be divided into the possible and the impossible, just as propositions can be divided into the true and the false. Of course, a term or a proposition then states falsely what it states. From this it is evident also how every simple term can be conceived as involving something complex, insofar as it affirms a possibility.

modo quo reduximus complexas ad incomplexas: v.g. si homo est beabilis, sequitur quod anima ejus sit immortalis, haec propositio reduci potest ad hanc: hominem esse beabilem est animam hominis esse immortalem. Ita etiam omnes syllogismi hypothetici reducuntur ad leges Categoricalorum.

A Terminis et Enuntiationibus praestat omnia transferre ad res, et veritates.

Ex Hypothesi, quod nihil aliud existat, quam Monades, et quod eae modificentur varie et consentienter, fit ut omnia caetera Entia quae concipimus non sint nisi phaenomena bene fundata.

Ita corpora omnia non magis erunt substantiae quam iris, et omnes qualitates corporeae non magis erunt reales, quam colores iridis. Nec magis sensus tactus quam visus nobis probat corpora esse substantias.

Spatium non magis est substantia quam tempus.

Extensio ipse tantum abest, ut sit aliquid primitivum quemadmodum concipiunt quidam praesertim Cartesiani, ut potius nihil aliud sit quam multitudo comperceptionum coordinatarum seu phaenomenorum quatenus habent ordinem coexistendi communem. Simul percipio A, B, C, et alia est comperceptio ipsorum A et B, quam ipsorum A et C, aut ipsorum B et C non considerando licet quid sit in ipsis varium, seu in quo differant intrinsecus A, B, C. Atque hoc observando, dico me percipere spatium et extensionem. Ipsa autem A, et B et C considero ut puncta, seu ea in quibus nihil observari potest, quam situs, seu quod simul percipiantur; cum aliquo discrimine comperceptionis.

Moveri dicitur, situm habens in quo causa est mutati situs, seu ex quo mutati ejus cum alio situs ratio redditur. Quod si sufficiens ex ipso ratio redditur hoc unum movetur, caeteris quiescentibus; sin minus, plura simul moventur.

Des Bosses to Leibniz

Illustrissime Vir, Patrone Colendissime

Ad gratissimas litteras Tuas ternas Vienna datas hucusque responsum reddidi nullum quia TE brevi has in oras rediturum indicabas in singulis. Nunc cum TE praeter, non tamen contra spem meam illic morari videam

other hand, hypothetical propositions can be reduced to absolute propositions by the fact that we have reduced complex terms to simple terms. For example, "If man is capable of blessedness, it follows that his soul is immortal"; this proposition can be reduced to the following: "For a man to be capable of blessedness is for the soul of the man to be immortal." In this way, as well, every hypothetical syllogism is reducible to the laws of the categorical syllogism.

It is preferable to translate everything from terms and propositions into things and truths.

By hypothesis, since nothing exists except monads, and since these are modified in various ways and in agreement, it follows that all other beings that we conceive are only well-founded phenomena.

Thus all bodies will be no more substances than a rainbow, and all qualities of bodies are no more real than the colors of a rainbow. And we no more prove by the sense of touch than by sight that bodies are substances.

Space is no more a substance than time.

Extension is so far from being something primitive, in the way some conceive of it, especially Cartesians, that instead it is only a multitude of coordinated co-perceptions or phenomena, insofar as these have a common order of coexisting. I simultaneously perceive A, B, and C, and the co-perception of A and B is something different from that of A and C or that of B and C, though without considering what is different in each of them or how A, B, and C differ intrinsically. And, in observing this, I say that I perceive space and extension. But A, B, and C themselves I regard as points, either those things in which nothing except situation can be observed or, because they are perceived simultaneously, with some difference of co-perception.

Something having situation is said *to move* when it is the cause of a change of situation, that is, when from it, together with something else, a reason for its change of situation is given. But if a sufficient reason is given from it, it moves while the rest remain at rest; if, on the contrary, it is less than sufficient, several things move simultaneously.

58. Des Bosses to Leibniz¹

[Paderborn, 8 August 1713]

Most Distinguished Sir, Most Esteemed Patron,

I did not respond to your three most welcome letters sent earlier from Vienna because you indicated in one of them that you would soon be back within our borders.² Now, since I see that you are delayed there still,

(opto enim Te sedem illic figere denique) alteras Orbani nostri litteras eo mittendi consilium cepi. Tradet eas Tibi, si quidem adhuc agas Viennae, R. P. Fridericus Consbruch e provincia hac nostra recens ad aulam Caesarem evocatus commendatione Serenissimi Ducis Antonii Ulrici, ut Imperatrici sit a confessionibus, Vir candidissimus ac plurium annorum contubernio consuetudineque mihi notus ac familiaris. Ac ne Orbanus ad TE incomitatus eat ad Epistolam Tuam philosophicam 24 Januarii scriptam adnotabo paucula.

Censes vincula substantialia quae admissis substantiis corporeis statuenda sunt, quamvis absoluta sint, non tamen semper inde ab initio extitisse, sed generationi corruptionique subjacere. At ego naturae, imo principiis Tuis consentaneum magis esse putaveram si generatim quidquid absolutum est, ingenerabile incorruptibileque esse, atque adeo vel ab initio extitisse vel successu temporis a Deo creari debere poneretur. Nam si semel admittamus ens quodpiam absolutum generari corrumpique naturaliter quid vetabit quominus Peripatetici recte statuere possint substantiales formas quae quantumvis absolutae sint, naturaliter tamen oriantur et intereant. In Tentaminibus Tuis, §88, postquam ad explicandam generationem formarum dixisses Peripateticos uti comparatione statuatur quae superflui marmoris ademptione perficitur, subdis: Comparatio ista locum habere posset si forma, uti figura, in nuda limitatione consisteret: nempe ut addis §89 *modificationum origo per eductionem sive limitum variationem explicari facile potest: at longe aliud est ubi de substantia* (utique absoluta) *sermo est, cujus ortus perinde ac interitus difficiles sunt explicatu*. Nempe ad fluxa illa vincula substantialia *absoluta* producenda perpetuis opus erit miraculis quae caveri possunt si duntaxat modalia ponantur, quibus habitis non difficile, opinor erit absolutum illud quod ad realizanda phaenomena aliunde requiritur a substantiae compositae constitutione secludere, atque adeo ad accidentium classem relegare si per accidens intelligatur id quod nec est substantia simplex nec substantiae compositae constitutionem ingreditur, neque sine alterutra *connaturaliter* existere potest.

Quidquid sit an monades subordinatae monadi praedominanti sint pars substantialis, id est essentialis corporum physicorum, quod non assero, at saltem substantia corporea complete sumpta (V.G. homo aut equus) mo-

though not contrary to my hopes (for I would like you to make your home there in the end), I have formed the plan of sending another letter there from our Orban. The Reverend Father Friedrich Consbruch, who was recently called from this province to the imperial court on the recommendation of Grand Duke Anton Ulrich in order to be the empress's confessor, will convey it to you, if indeed you are still living in Vienna. He is a most honest man, whom I have known and associated with for many years through daily contact and companionship. And so that Orban's letter does not go to you on its own, I shall make a few remarks on your philosophical letter of 24 January.

You argue that although the substantial bonds that must be established when corporeal substances are admitted are absolute, they nonetheless have not existed always from the beginning but are subject to generation and corruption. But I had thought on the contrary that it would be more in keeping with your principles of nature, if in general whatever is absolute is taken to be ingenerable and incorruptible, and therefore should either have existed from the beginning or be created by God at a later time. For if we ever admit that a being that is naturally generated and corrupted is anything absolute, what will prevent the Peripatetics from rightly being able to establish substantial forms, which, however much they are absolute, nonetheless arise and perish naturally? In section 88 of your *Theodicy*, after having said that the Peripatetics use the example of a statue that is produced by the removal of superfluous marble to explain the generation of forms, you claim that comparison might be valid if form, like shape, consisted in a mere limitation.³ Indeed, as you add in section 89: "The origin of modifications by eduction or by the variation of limitations can be explained easily: but it is quite another matter when we are talking of substance (as an absolute), whose coming to be and passing away are equally difficult to explain."⁴ Indeed, in order to produce these fluctuating, *absolute* substantial bonds, it will be necessary to have perpetual miracles, which can be avoided if they are taken to be merely modal. Given this, I believe, it will not be difficult to exclude that absolute thing, which on other grounds is required for the realizing of phenomena, from the constitution of composite substance and thus to relegate it to the class of accidents, if one understands by "accident" that which is neither a simple substance nor enters into the constitution of a composite substance, but which cannot exist *connaturally*⁵ without one or the other of the two.

I do not claim to settle whether monads that are subordinated to a dominant monad are substantial, that is, essential parts of physical bodies; but at least when the corporeal substance is taken completely (for example, a

nadem sibi propriam, nempe praedominantem essentialiter includit. Homo enim constat essentialiter non e solo corpore sed etiam ex anima: caeterae vero sive Entelechiaes sive monades subordinatae, non quidem pars substantialis essentialis, sed integralis esse possunt.

De caetero si monades, uti censes, nullam aliam modificationem quam perceptiones et appetitiones admitterent (cujus placiti rationem a TE intelligere cuperem) dici fortasse posset iuxta hujusque a me disputata vinculum substantiale modale consistere in quibusdam substantialibus perceptionibus aut appetitionibus aut certe in utrisque quibus fit ut caeterae monades uni praedominanti subordinentur substantialiter, quaeque essentialiter existentes simul, sint ipsa monadum subordinatio.

Accedit alia ratio cur vinculum substantiale monadum ad constituentem substantiam compositam requisitum modum esse mallet quam entitatem absolutam nempe quod omnis substantia dicat essentialiter simultatem omnium suarum partium, omnis autem entitas absoluta sine quavis alia entitate creata absoluta a se distincta existere posse videtur ergo nulla entitatum absolutarum solarum collectio (puta collectio animae monadis humanae et vinculi substantialis absoluti) constituere potest adaequate substantiam completam quae homo dicitur. Sed de his satis.

Prodiit Antverpiae (nisi titulus mentitur) Philagrii Le Roy Philosophia Eclectica Radicalis quae quantum obiter inspicienti judicare licuit, aliquid boni continere videtur.

Expecto indies Roma *Refutationem Philosophiae Cartesianae* adornatam a quodam e nostris, a Patre Brunacio, ut suspicor, is enim hujusmodi refutationem meditari dudum dictus est.

De versione mea praeclari operis tui nihil dicam, donec residuam ejus partem videris. Vale Illustrissime Domine. Dabam Paderbornae 8 Augusti 1713.

Excellentiae TUae
Devotissimus cliens
Bartholomaeus Des Bosses
Societatis JESU

Leibniz to Des Bosses

R^{me} Pater Fautor Honoratissime

Gaudeo TE bene valere et mei amice meminisse. Literae Tuae redditae mihi sunt Rmi Patris Consbruchii beneficio, una cum Orbanianis. Paro me

man or a horse), it includes its own monad, namely the dominant monad, essentially. For a man consists essentially not only of his body but also of his soul; everything else, whether entelechies or subordinate monads, cannot indeed be an essential substantial part, but it can be an integral part.

As for the rest, if, as you argue, monads admit no other modification than perceptions and appetitions (I have been wanting to learn from you the reason why this is preferable), it could perhaps be said, in connection with my argument up to this point, that a modal substantial bond consists in certain substantial perceptions or appetitions, or indeed in both, by which it comes about that the rest of the monads are subordinated substantially to one dominant monad, and that the subordination itself of monads occurs when any exist together essentially.

There is another reason why I would prefer that the substantial bond of monads required for the constitution of a composite substance be a mode rather than an absolute entity, namely, that every substance affirms essentially the coexistence of all its parts, but every absolute entity seems able to exist without any other absolute created entity that is distinct from it. Therefore, no collection of absolute entities alone (think of the collection of a human soul monad and of an absolute substantial bond) can adequately constitute the complete substance that is called a human being. But enough of this.

A book has appeared in Antwerp by (unless the title deceives) Philagrius Le Roy, *Eclectic Foundational Philosophy*, which insofar as it was possible to judge by browsing through it seems to contain some good things.⁶

I expect from Rome shortly the *Refutation of Cartesian Philosophy* prepared by someone from our order; Father Brunaci, I suspect, for he was said a short time ago to be thinking about a refutation of this sort.⁷

I shall say nothing about my translation of your excellent work until you have seen the remaining part. Farewell, most distinguished Sir. From Paderborn, 8 August 1713.

Your Excellency's most devoted servant,
Bartholomew Des Bosses, Society of Jesus

59. Leibniz to Des Bosses¹

[Vienna, 23 August 1713]

Most Reverend Father, Most Honored Supporter,

I am happy that you are well and that you remember me kindly. With the help of the Most Reverend Father Consbruch, I received your letter along

ad iter Hanoveranum, sed nescio quas per ambages, quia infamata est Vienna contagii metu. Ego tamen neminem adhuc morientem aut moribundum vidi, grassaturque lues in plebe, ubi terrore et miseriis alitur. Caesar, nisi ingravescat malum, cedere negat; quicquid suadeant qui tanto principitiment. Id agit princeps maximus, mecumque non semel in deliberatione vocavit, quomodo Societas aliqua Scientiarum condi possit, quae sedem Viennae habeat, ita tamen ut alibi quoque socii non desint. Sed res ob brevitate[m] temporis nunc absolvi non potest, spero tamen ad effectum perducendam.

Quae de Vinculis substantialibus olim ad TE scripsi nunc non invenio. Si admittimus substantias corporeas, seu aliquid substantiale praeter monades, ita ut corpora non sint mera phaenomena, necesse est vincula substantialia non esse meros modos monadum. Praeterea si vinculum substantiale sit accidens seu modus, non poterit esse simul in pluribus subjectis, et proinde nullum revera dabitur Vinculum substantiale plurium Monadum, sed in qualibet Monade erit Modalitas propria ad aliam Monadem relativa; et ita rursus corpora mera erunt phaenomena. Et cum Monades nihil sint aliud quam repraesentationes phaenomenorum cum transitu ad nova phaenomena patet in iis ob repraesentationem esse perceptionem, ob transitum esse appetitionem; nec dantur principia unde aliquid aliud peti possit.

Interim objectio Tua R^{me} Pater mihi consideratione digna visa est, ex eo sumta, quod vincula substantialia generabilia et corruptibilia dixeram, id vero modalium proprium videtur, ex meis etiam principiis, nec convenire absolutis. Et ideo re expensa hactenus sententiam muto, ut putem jam nihil oriri absurdi, si etiam vinculum substantiale seu ipsa substantia compositi dicatur ingenerabilis et incorruptibilis. Quoniam revera nullam substantiam corpoream admittendam puto, nisi ubi est corpus organicum cum Monade dominante, seu vivum; animal scilicet, vel animali analogum. Caetera vero esse aggregata pura seu unum per accidens, non unum per se. Cum ergo, ut scis, non tantum animam, sed etiam animal interire negem, dicam igitur nec vinculum substantiale seu substantiam corporis animati naturaliter oriri et occidere, sed cum aliquid absolutum sit, tantum variari secundum mutationes animalis. Hinc substantia corporea, vel vinculum

with that of Orban. I am preparing myself for the trip to Hanover, but I do not know by what roundabout way, since the plague is in Vienna along with the fear of infection. Still, thus far I have seen no one wasting away or dying, and the disease spreads among the people, where it is fed by terror and misery. The emperor is refusing to leave unless this evil becomes worse; let all who fear for such a great prince plead with him.² The supreme prince is carrying on, and he has discussed with me more than once how some society of sciences could be established, which would have its seat in Vienna but would nonetheless also have members from elsewhere. But, as time is short, the matter cannot be resolved now; still, I am hopeful that it will be brought to a successful conclusion.

I cannot find now what I wrote to you some time ago about substantial bonds. If we admit corporeal substances, or something substantial besides monads, so that bodies are not mere phenomena, it is necessary that substantial bonds not be mere modes of monads.³ Besides, if the substantial bond were an accident or a mode, it could not be in several subjects at the same time. And hence there will in fact be no substantial bond of many monads, but in any particular monad there will be an appropriate modality relative to another monad; and so, again, bodies will be mere phenomena.⁴ And since monads are nothing other than representations of phenomena with a transition to new phenomena, it is clear that in monads there is perception on account of the representation, and appetite on account of the transition; and there are no principles from which anything else could be sought.

Meanwhile, Most Reverend Father, your objection, brought against what I had said about the generation and corruption of substantial bonds, seemed to me worthy of consideration. It truly seems to be a modal property, even according to my principles, and one that does not befit absolutes. Therefore, having considered the matter, I change my opinion to this extent: I now think that nothing absurd arises, if the substantial bond, or the substance itself of the composite, is also said to be ingenerable and incorruptible, because I think that no corporeal substance should really be admitted except where there is an organic body with a dominant monad, or a living thing, that is, an animal, or something analogous to an animal. Everything else, in fact, is a mere aggregate, or an accidental unity, not a *per se* unity. Since, therefore, as you know, I deny that not only the soul but also the animal dies, I shall accordingly say that the substantial bond, or the substance of the animated body, does not arise and perish naturally, but that, since it is something absolute, it only varies, according to the changes of the animal. Hence corporeal substance, or the substantial bond of mo-

substantiale Monadum, etsi naturaliter seu physice exigat Monades, quia tamen non est in illis tanquam in subjecto, non requiret eas metaphysice, adeoque salvis monadibus tolli vel mutari potest, et monadibus naturaliter non suis accommodari. Nec ulla monas praeter dominantem, etiam naturaliter vinculo substantiali affixa est, cum monades caeterae sint in perpetuo fluxu.

Substantiam non putem simultatem suarum partium dicere, alioqui enim foret aggregatum. Partes quarum est vinculum etsi sint ei connaturales, non tamen sunt ei essentiales; itaque naturaliter tollantur paulatim et ordinate sed miraculose statim et per saltum distinguui a vinculo possunt, et vinculum ipsum tolli.

Etsi autem panis et vinum non sint viventia, tamen ut omnia corpora, sunt ex viventibus aggregata, et vincula substantialia singulorum viventium componentium, substantiam eorum componunt. At Corpus Christi vinculum substantiale totale habet, cum sit corpus vivum. Denique si quid est quod substantiam corpoream constituit, in eo vobis quaerenda est possibilitas Transsubstantiationis. Sin nihil tale sit et corpora sint mera phaenomena, substantia corporis quaerenda erit in solis phaenomenis. At non nostris, quibus manent priores species, sed in his quae Menti Divinae et iis quibus revelat Deus obversantur.

Nondum discere potui an Recensio Theodicaeae aliqua inserta sit Commemorationibus Librariis Trivultianis. Si quid ea de re intelligis, doce me quaeso. In his oris nec commemorationes illae Trivultianae, nec Diarium Parisinum habetur. Sed spero aliquando, annitente Imperatore Musas Viennenses caput erecturas esse.

Vidi quaedam ingeniosa admodum scripta a R. P. Sacorierio Mathematico Ticinensi ex ordine vestro in lucem edita; etsi sententias quasdam Mathematicas foveat, quas non omnino probare possum.

Opto ut prodeat Bibliotheca vestrae Societatis Alegambio-Sothwelliana per P. Bonannum ad novissima tempora continuata. Valde enim vellem notitiam habere praeclarorum virorum ordinis vestri. R^{mo} Patri Orbano inclusas mitti peto. Ego me id reditum paro. Quod superest vale R^{me} Pater et fave. Dabam Vienna 23 Aug. 1713.

Deditissimus

G. G. Leibniz

nads, although it requires monads naturally or physically, does not require them metaphysically, since it is nonetheless not in them as in a subject. Thus, it can be destroyed or changed,⁵ while the monads are preserved, and accommodated to monads that do not naturally belong to it.⁶ Nor is any monad besides the dominant monad even naturally attached to the substantial bond, since the other monads are in perpetual flux.

I would not think of saying that a substance is a concurrence of its parts, for otherwise it would be an aggregate. Even if the parts whose bond it is are connatural to it, they still are not essential to it; and so the parts are naturally removed gradually and in an orderly manner,⁷ but they can be separated from the bond miraculously at once and in a leap, and the bond itself destroyed.

Although bread and wine are not living things, still, like all bodies, they are aggregates of living things, and the substantial bonds of the individual living components constitute their substance. The body of Christ, however, has a total substantial bond, since it is a living body. Finally, if there is something that constitutes corporeal substance, you should seek the possibility of transubstantiation in it. If there is no such thing, and bodies are mere phenomena, then the substance of body should be sought in the phenomena alone. But not in our phenomena, in which the prior appearances remain, but in those that appear to the divine mind and to those to whom God reveals them.

I have not been able to learn yet if a review of the *Theodicy* has been inserted in the *Mémoires de Trévoux*. If you know something about this, please let me know. In these circles, they have neither the *Mémoires de Trévoux* nor the *Journal des savants*. But I hope that sometime, through the efforts of the emperor, the muses of Vienna will raise their heads.

I saw that some very clever writings by the Reverend Father Saccheri, a mathematician from Pavia of your order, have been published, but he holds certain mathematical propositions of which I cannot approve at all.⁸

I hope that the Alegambe-Southwell *Bibliotheca* of your society will, thanks to Father Bonann, continue up to the present time.⁹ For I should very much like to have knowledge of the distinguished men of your order. I ask that the enclosed letter be sent to the Most Reverend Father Orban. I am preparing for my return. For the rest, farewell, Most Reverend Father, and think kindly of me. From Vienna, 23 August 1713.

Most faithfully,

G. W. Leibniz

Leibniz to Des Bosses

Iter meum duae magnae causae distulere, obsepta ob contagii metum itinera; neque enim libenter sesquimestre in nescio quo loco incommodo inutiliter, nec sine periculo, perdere volebam; et deinde, appetente hyeme, non optime valetudo, arthriticis insultibus, non acutis quidem, sed tamen ideo gravibus, quod agendi libertatem adimerent, me invadentibus; nec dum plane omnem vigorem recepi. Itaque iter nonnihil adhuc differre cogor.

Intelligo recensionem Theodicaeae meae tandem aliquando in Diario Trivultiano comparuisse, quamquam non sine nota, haud tamen, ut spero, acerba. Hanc recensionem videre aliquando aveo.

Si Rmi Patris Orbani fasciculus non est insolitae magnitudinis, recta Viennam mitti posset.

Scire aveo quid de meo nupero temperamento iudices; cum perscripsi re magis expensa, si quod detur vinculum substantiale compositi, id fore non minus perpetuum naturaliter, quam ipsam Monadem, compositi dominatricem, salvis ante Monadibus ingredientibus mutari, et aliis atque aliis Monadibus accommodari posse; naturaliter quidem paulatim, supernaturaliter autem per saltum, quemadmodum et supernaturaliter produci, ac tolli potest.

Nihilne amplius de rebus Sinensium?

Quod superest, vale, et fave. Dabam Viennae 10 Januarii 1714.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Fidem in nuperis meis datam libero tardius quod speraveram indies certi quidpiam de Theodicaeae recensione posse nunciare nec me mea spes usquequaque fefellit, nam quamvis Diarium Trivultianum nondum ad me pervenerit binas tamen a Turnamino nostro litteras accepi ex quarum excerptis in paginam posteriorem rejectis quanto apud Gallos in pretio sit Theodicaea Tua, facile colliges. Animos mihi fecit quod Versionem quoque latinam egregii operis Tui non ingratham fore auguratur.

60. Leibniz to Des Bosses¹

[Vienna, 10 January 1714]

Two major causes have delayed my journey. With my passage blocked because of the fear of contagion, I did not willingly want to lose a month and a half in I know not what uncomfortable and dangerous place; and then, with winter drawing near, I was not in the best of health, with arthritis flaring up, which was not in fact acute but still afflicted me badly enough that it took away my freedom of movement. I have not yet fully regained all my strength. Consequently, I am still trying to delay the trip for a while.

I understand that the review of my *Theodicy* was finally printed sometime in the *Mémoires de Trévoux*. Though not uncritical, it is still not at all harsh, as I expected it to be. I am eager to see the review sometime.

If the packet from the Most Reverend Father Orban is not especially large, it could be sent straight to Vienna.²

I am eager to know what you think of the recent moderation of my position, when I wrote after having considered the matter further. If there is a substantial bond of the composite, it will be naturally no less perpetual than the monad itself, that is, the monad that governs the composite; it could be changed with the ingredient monads preserved as before, and it could be accommodated to other things and other monads. Of course, naturally this would be by degrees, but supernaturally it would be through a leap, just as it could also be produced and destroyed supernaturally.

Is there no news concerning events in China?

For the rest, farewell and think kindly of me. From Vienna, 10 January 1714.

61. Des Bosses to Leibniz¹

[Cologne, 22 March 1714]

Most Distinguished Sir, Most Esteemed Patron,

I am fulfilling the promise made in my last letter rather tardily because each day I had hoped that something definite could be reported about the review of the *Theodicy*. My hope did not completely deceive me, for although the *Mémoires de Trévoux* has not yet reached me, I nevertheless received two letters from our Tournemine. From the excerpts of these given on the last page, you will easily gather how highly your *Theodicy* is regarded among the French.² It made me proud that the Latin translation of

Memineris opinor non nisi praeliminarem dissertationem et partem primam a TE hucusque fuisse recensitas, alias duas partes paulo post discesum Tuum Hannoveram missas. Praefatio una cum duabus appendicibus adhuc penes me est nutumque Tuum expectat.

Perplacet temperamentum Tuum quo statuis si quod detur realizans phaenomena id fore non minus perpetuum quam ipsam monada compositi dominatricem, consonat cogitatio illa tua sententiae philosophorum plurimorum qui cum Averroe dimensionem interminatam materiae coevam statuunt, licet contrarium sentiat S. Thomas Aquinas, magis consequenter ille quidem fortasse quam Averroes sed nixus tamen principio quod certum non est nec a TE admittitur, nempe accidentia, quale est dimensio, subjectari in toto composito, atque adeo eadem intereunte composito interire. Si compositum semper manere censuisset S. Thomas, ut Tu Monada et animal ipsum, nil dubium quin etiam dimensiones manere posuisset.

De caetero adhuc sentio realizans illud phaenomena supervenire toti composito sive animali jam sufficienter constituto per vincula modalia nam talia vincula admitti debere mihi persuadent metaphysicae rationes quas quominus hic deducam prohibet inopinatum impedimentum. De his proxime.

Si quid Parisienses Theodicaeae editores monitos voles, aut si quid de caetero sit quod Diario dignum sit ad me mittere quaeso ne graveris. Vive Illustrissime Domine, et vale. Dabam Coloniae Agrippinae 22 Martii 1714.

Illustrissimae Dominationi Tuae
Devotissimus
Bartholomaeus Des Bosses SJ

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Inquisitione dignum est, quid nam excogitari possit quod sit aptum ad realitatem phaenomenis extra percipientia conciliandam, seu quid constituat substantiam compositam. Quantum judicare possum debet consistere in potentia activa et passiva primitivis compositi; idque erit quod Materiam primam et Formam substantialem vocant, et oportebit ut accidentia compositi sint ejus modificationes; quae quidem transitoriae sunt, ipsa autem substantia composita durabit, aequae ac Monas dominatrix. Nulla

your excellent work is also foreseen as being worthwhile. You will remember, I believe, that only the preliminary discourse and the first part have been reviewed by you but that the other two parts were sent shortly after your departure from Hanover. A preface and two appendices are still in my possession and await your approval.

The moderation of your position, in which you state that, if there is something realizing the phenomena, it will be no less perpetual than the dominant monad itself of the composite, is thoroughly pleasing. This thought of yours agrees with the opinion of many philosophers, who, with Averroës, state that undetermined dimension is coeval with matter, even if St. Thomas Aquinas may think the contrary.³ But Aquinas, perhaps even more consistently than Averroës, relied upon a principle that is not certain and is not admitted by you: namely, that accidents, such as dimension, are subject to the whole composite, and so perish when the composite perishes. If St. Thomas had thought that the composite always remained, as you think monads and the animal itself do, there is no doubt that he would have thought that dimensions also could remain.

For the rest, I still think that the thing that realizes phenomena supervenes on the entire composite or animal, which is already sufficiently constituted by modal bonds. For metaphysical reasons that an unexpected interruption prevents me from drawing on here persuade me that such bonds ought to be admitted. More about this later.⁴

If you wish the editors in Paris to be advised of anything in the *Theodicy* or if something else is appropriate for the *Mémoires de Trévoux*, I ask that you send it to me unless you are overly burdened. Be well, most distinguished Sir, and farewell. From Cologne, 22 March 1714.

Your Excellency's most devoted
Bartholomew Des Bosses, S.J.

62. Leibniz to Des Bosses¹

[Vienna, 21 April 1714]

Most Reverend Father, Most Honored Supporter,

It is worth considering what can be devised that is suitable for producing reality in phenomena outside of perceiving things, that is, what constitutes composite substance. As far as I can determine, it will have to consist in primitive active and passive power, and it will be what is called the primary matter and substantial form of the composite. And it will be necessary that the accidents of the composite are modifications of it; these are indeed transitory, but the composite substance itself will endure, as will

autem est substantia composita, seu revera constituens unum per se, nisi ubi est Monas dominatrix cum corpore organico vivo.

Quod ais substantiale illud vinculum supervenire composito jam constituto per vincula modalia; hoc ita interpretor, ut praescindendo a substantia composita, Monades constituent tantum unum per accidens. Sed illud unum per accidens, ni fallor erit merum phaenomenum. Cum enim nulla modificatio per se subsistere possit, sed essentialiter postulet subjectum substantiale; ideo vincula illa quod habent reale, habebunt in modificatione cujuslibet Monadis, et harmonia seu consensu Monadum inter se; neque enim admittes credo accidens, quod simul sit in duobus subjectis. Ita de Relationibus censeo aliud esse paternitatem in Davide aliud filiationem in Salomone, sed relationem communem utrique esse rem mere mentalem, cujus fundamentum sint modificationes singulorum.

Optarem valde discere quam primum, in quo consistant monita Trivultiana circa ea quae in meo libro erronea vel obscura videri possint: fortasse enim explicando mentem meam, possem tollere erroris speciem Epistola scripta quae adjici novae editioni posset, nisi id serum est. Quanquam etiam absoluta editione nondum distractis pro parte exemplaribus posset adjici haec declaratio. Itaque si saltem periodi monita illa continentes ex Trivultiana recensione descriptae mecum quam primum communicarentur, posset fortasse satisfieri et Trivultianis vestris, et lectori et mihi. R^{mum} Patrem Turnaminum a me officiosissime salutari peto. Quod superest vale et fave. Dabam Viennae 21 Aprilis 1714.

Deditissimus

G. G. Leibnitius

Gaudeo intelligere falsos fuisse rumores qui de caede Monarchae Sinensis et persecutione Missionariorum ex Batavis sparsi fuere et gratum erit porro discere, quis ibi sit rerum status.

P.S. Mense Majo Deo volente hinc discedam. Si quidem R^{mus} Turnaminus mittat, aut si ad TE perveniant Monita Trivultiana, rogo ut Hannoveram per cursorem ordinarium deferri cures. Inde enim mihi vel in itinere reddi poterunt. Rogo ut simul Tuum judicium de Monitis Trivultianis ad me perscribas, suggerasque si quid mihi tuendo facere videatur.

the dominant monad. However, there is no composite substance, that is, a being truly constituting a per se unity, except where there is a dominant monad with a living organic body.²

I interpret what you say about the substantial bond supervening on a composite already constituted by modal bonds in the following way: when they are removed from a composite substance, monads constitute only an accidental unity. But that accidental unity will be, unless I am mistaken, a mere phenomenon. For since no modification can subsist by itself, but essentially requires a substantial subject, those bonds will have what reality they have in the modification of any monad and in the harmony or agreement of the monads with each other. For I believe you will not admit an accident that is in two subjects at the same time. Thus I think the following about relations: paternity in David is one thing, filiation in Solomon another, but the relation common to both is a merely mental thing, whose foundation is the modifications of the individuals.

I should very much like to know as soon as possible what the criticisms were from the *Mémoires de Trévoux* concerning the things that might appear erroneous or obscure in my book.³ For perhaps in explaining my view I could remove the appearance of error with a letter that could be added to the new edition, unless it is too late. And even if the edition is printed, this statement could be added to the copies that have not yet been distributed. Therefore, if at least the sentences containing the criticisms transcribed from the review in the *Mémoires de Trévoux* were communicated to me as soon as possible, I could perhaps satisfy your colleagues in Trévoux, along with readers and myself. Please give my warmest greetings to the Reverend Father Tournemine. For the rest, farewell and think kindly of me. From Vienna, 21 April 1714.

Most faithfully,

G. W. Leibniz

I am pleased to hear that the rumors spread from Holland about the fall of the emperor of China and the persecution of missionaries were false. I shall be happy to learn in the future what the state of things is there.

P.S. In the month of May, God willing, I shall depart from here. If indeed the Most Reverend Tournemine sends something, or if the criticisms from the *Mémoires de Trévoux* reach you, I ask that you take the trouble to forward them to Hanover by the regular courier. For from there they can be sent to me even if I am in transit. I ask also that you write to me at the same time with your judgment concerning the criticisms of the *Mémoires de Trévoux* and make suggestions if it seems that anything might be done to defend me.

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Recentissimis litteris a Turnamino nostro edoceor Diarium Trivultianum, in quo Theodicaea recensetur necdum ad TE pervenisse. Atqui ego illud, uti jussus eram, a tribus facile mensibus per Hildesienses nostros Hannoveram transmittendum curaveram, una cum versione Praefationis et duarum appendicum, quae adhuc desiderabantur. Et intellexi Hildesio dudum fasciculum fuisse missum Hannoveram, rogatumque rerum Tuarum curatorem, ut confestim ad TE, ubi ubi esses destinaret. In quo nunc culpa haereat divinare non possum.

Scribit Turnaminus Editionem Theodicaeae Parisiensem vulgatam jam esse, optimeque distrahi. Idem fortasse de Versione sperare fas esset si lucem videret.

Caeterum distuli responsum ad postremas Tuas 4 Aprilis datas quod Vienna discessurum TE putarem, nunc cum et aliunde, et ex novellis publicis didicerim Academiae tandem novae sub Caesareis auspiciis condendae initium TE fecisse, de quo ex animo gratulor, non audebo posthac litteris meis gravissimas curas Tuas interpellare. Liceat mihi tamen hac etiam vice ac postremum de veteri controversia nostra saltem verbulo meminisse.

Equidem, Illustrissime Domine, Hypothesin corpora ad sola phaenomena redigentem tanquam ingeniosum paradoxum suscipio sed ut candide fatear, absolute admittere non posse videor; illam ab Anglo philosopho nuper acute propugnatam, a multis eruditis male exceptam intellexi.

Itaque communi et hominibus quasi innatae hypothese corporibus realitatem tribuendi standum esse arbitrarer, maxime cum suspicer omnia commoda quae ex priori eliciantur huic quoque non difficulter fortasse, si rite explanetur, accommodari posse.

Juxta hanc ergo hypothesin communem dubium non est quin *illud realizans phaenomena* varietatem in se aliquam patiatur cum manifestum sit variari phaenomena. At quae hujus varietatis causa? Non solus Deus. Id enim foret perpetuum miraculum non ipsum *realizans phaenomena* ut pote minime activum. Restant itaque solae monades subordinatae et subordinans quae si in corpus agant, corpus pendeat ab illis. Et illae erunt priores corpore. Et statuis ni fallor alicubi ne Deum quidem ipsum agere

63. Des Bosses to Leibniz¹

[Cologne, 20 September 1714]

Most Distinguished Sir, Most Esteemed Patron,

I was informed by our Tournemine in his most recent letter that the volume of the *Mémoires de Trévoux* in which the *Theodicy* is reviewed had not yet reached you. But, as instructed, I had taken care that it be sent through Hildesheim to Hanover easily three months ago, together with the translation of the preface and the two appendices, which until now was lacking. I also learned that a packet was sent to Hanover from Hildesheim a short time ago, and that the person taking care of your things was asked to direct this to you without delay wherever you might be. Where the blame now lies, I cannot say.

Tournemine writes that the Paris edition of the *Theodicy* has already been published and distributed as widely as possible. Perhaps there would be reason to hope for the same regarding the translation, if it should see the light of day.

For the rest, I put off a response to your most recent letter, dated 4 April,² because I thought that you would be leaving Vienna; now, since I have learned from the latest public reports and other sources that you have at last made a start on the new academy, established under the auspices of the emperor (for which I heartily congratulate you), I shall not dare hereafter to disturb your important work with my letters. Still, let me on this occasion once again and for the last time at least mention our old controversy.

For my part, most distinguished Sir, I find that the hypothesis reducing bodies to mere phenomena is like an ingenious paradox, but, to confess candidly, I seem unable to accept it fully. I understand that when this hypothesis was cleverly defended recently by an English philosopher, it was badly received by many scholars.³

And so, in my judgment, the common hypothesis of attributing reality to bodies, which is almost innate to human beings, should be upheld, especially since I suspect that all the advantages that are drawn from the previous hypothesis can probably be ascribed to this one without difficulty as well, if properly explained.

Therefore, in accordance with this common hypothesis, there is no doubt that *that thing realizing phenomena* undergoes some variation in itself, since it is clear that the phenomena are changed. But what is the cause of this variation? Not God alone; for that would be a perpetual miracle, inasmuch as the thing *realizing phenomena* would not be active at all. And so only subordinate and subordinating monads remain, which the body will depend upon if they act in the body; and they will be prior to the body.

posse in materiam si materia a Deo tanquam causa non penderet. Vale Vir illustrissime et rem ex animi sententia ad majus Divini nominis incrementum, et totius Imperii decus gere. Dabam Coloniae 20 7bris 1714.

Illustrissimae Dominationi Tuae

Devotissimus

Bartholomaeus Des Bosses

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Hanc hyemem satis gravem malis arthriticis expertus sum, nec dum plane sum liberatus. Itaque aegre necessariis laboribus satisfeci, quae dilationem nullam patiebantur. Quia tamen spes semper in fundo remanet, non despero de recuperatione sanitatis.

Vereor ne qui de Actione Dei in creaturas pro praedeterminatione physica scripsit, involvat magis notiones quam in lucem producat. Actus non esse res absolutas, sed modificationes Entelechiaei seu conatus primitivi, manifestum esse arbitror; idque dicendum non tantum de voluntate, sed et de facultate agendi quacunque.

Recte tuemur corpora esse res, nam et phaenomena sunt realia. Sed si quis tueri velit corpora esse substantias indigebit credo novo quodam principio unionis realis.

Qui in Hibernia corporum realitatem impugnat, videtur nec rationes afferre idoneas, nec mentem suam satis explicare. Suspikor esse ex eo hominum genere, qui per paradoxa cognosci volunt.

Incidit mihi nuper dubitatio circa Magnetem quam vellem decidi experimento. Nemo autem hoc melius praestare poterit quam Dn. Hartsoekerus qui usum Magnetis multum, et necessarium ad Experimenta Magnetica apparatus habet. Mallem autem hoc quod desidero a TE peti quam a me. Nec dubito TIBI si commode potest libenter gratificaturum. Me autem dissimulari rogo.

Dignum est indagatione scilicet, utrum Attractio Magnetis aliquam habeat dependentiam a Verticitate; veluti an magnes in situ naturali (quo spe sponte vertit) melius trahat quam in violento.

Magnes polo A trahat acum CB verticaliter sitam: et vi attractionis ope brachii CD (licet non ferrei) ad acum normalis et affixi, et cum ea mobilis

And you claim somewhere, if I am not mistaken, that not even God himself could act on matter, if matter did not depend upon God as a cause. Farewell, most distinguished Sir, and carry on the project of leading the mind to the growth of the greater glory of God and bear the honor of the entire empire. From Cologne, 20 September 1714.

Your Excellency's most devoted
Bartholomew Des Bosses

64. Leibniz to Des Bosses¹

[Hanover, 15 March 1715]

Most Reverend Father, Most Honored Supporter,

I have found this winter rather hard because of arthritic pain, and I am not completely free of it yet. As a result, I have had difficulty carrying out necessary tasks that permitted no delay. Still, since hope always remains at my core, I am not without hope of recovering my health.

I fear that the person who wrote about the action of God on creatures in place of their physical predetermination confounds ideas more than he clarifies them.² I believe it is clear that actions are not absolute things but modifications of an entelechy or primitive endeavor, and this should be said not only of the will but also of any faculty of acting whatsoever.

We correctly maintain that bodies are things, for even phenomena are real. But if someone wishes to maintain that bodies are substances, it will require, I believe, some new principle of real union.

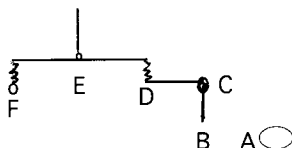
The man in Ireland who attacks the reality of bodies does not seem to make use of suitable arguments or to explain his view sufficiently. I suspect he is the sort of person who wants to be known for his paradoxes.³

A question occurred to me recently concerning the magnet that I should like to settle by experiment. No one could determine this better than Mr. Hartsoecker, who has much experience with magnets and the necessary apparatus for magnetic experiments. I should prefer, however, that what I desire be requested by you rather than by me, and I do not doubt that he would willingly do it as a favor to you, if it can easily be done. But I aim to conceal myself.

It is certainly worth investigating whether the attraction of a magnet has any dependence upon verticity; for example, whether a magnet attracts better in a natural position (toward which it turns itself spontaneously) than in a forced position.⁴

A magnet attracts a vertically placed needle CB by pole A: by the force of attraction, with the help of the arm CD (provided it is not made of iron)

circa C, sed in D alligati per filum ad brachium librae E; trahat D deorsum, et elevet sursum oppositum pondusculum F; quaeritur utrum magnes majus pondus sustinere vel elevare possit, cum polus est in situ naturali, ad quem se sponte convertit, quam cum est in situ violento opposito. Sed Dn. Hartsoekerus facile aliam rationem commodiorem hac experiendi comminiscetur. Suffecerit ex hac figura intelligi ab eo vim quaestionis.



Pono autem in utroque experimento acum adhuc esse virginem vel nondum imbutam, sive A trahat positus in situ naturali, sive in violento.

Quod superest vale et fave. Dabam Hannoverae 15 Martii 1715.

Deditissimus

G. G. Leibnitius

Des Bosses to Leibniz

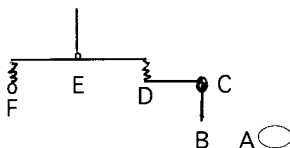
Illustrissime Domine Patrone Colendissime

Mitto Responsum Hartsoekeri super quaestione Magnetica. Experimentum quod adducit an rem evincat nescio, suspicor enim quod in limatura ferri insensibile est fieri posse sensibile si instrumenta accuratiora adhiberentur. De quo judicium tuum audire aveo.

Videris non observasse objectiunculam in aliqua priorum epistolarum mearum propositam cujus solutionem a te desidero. Est autem haec: In hypothesis quod deter aliquid realizans phaenomena distinctum a monadibus earumque perceptionibus, quaero quis efficiat mutationem phaenomenorum in ipso corpore? Si Deus, perpetuum erit miraculum; si monades, ergo corpus quodammodo pendebit a monadibus etc.

Subjungo alterum circa Harmonium praestitutum. Si monades univer-

perpendicular to the needle and affixed to it, and with this mobile about C but held at D by a thread to the arm of the scale E, the magnet attracts D downward and lifts the opposite weight F upward. The question is whether the magnet can support or elevate a greater weight when the pole is in a natural position, toward which it turns itself spontaneously, than when it is in the opposite forced position. But Mr. Hartsoeker will easily devise another method more suitable for this experiment. It will be enough if he understands the force of the question from this diagram.



Moreover, I assume that in both experiments—whether A attracts placed in a natural position or a forced position—the needle is still fresh or not yet magnetized.

For the rest, farewell and think kindly of me. From Hanover, 15 March 1715.

Most faithfully,
G. W. Leibniz

65. Des Bosses to Leibniz¹

[Cologne, 6 April 1715]

Most Distinguished Sir, Most Esteemed Patron,

I am sending Hartsoeker's response to the question concerning the magnet.² I do not know whether the experiment he adduces decides the matter, for I suspect that what is insensible in iron filings could be made sensible if more accurate instruments were used. I should like to hear your opinion concerning this.

You seem not to have observed the little objection posed in one of my previous letters, whose solution I desire from you.³ It is this: on the hypothesis that there is something realizing phenomena distinct from monads and their perceptions, I ask, what brings about the change of phenomena in the body itself? If God, it will be a perpetual miracle; if monads, then the body will depend somehow on the monads, etc.

I add here another objection concerning preestablished harmony. If all

sae ex propria penu, ut sic loquar, et sine ullo physico unius in aliam influxu perceptiones suas habent, si praeterea cujuslibet monadis perceptiones caeteris quae nunc a Deo creatae sunt monadibus, earumque perceptionibus praecise respondent et attemperantur eas repraesentando, non potuit ergo Deus ullam ex his quae modo existunt monadibus creare quin alias omnes quae nunc pariter existunt conderet, Deus enim nullo pacto efficere potest ut naturalis monadum perceptio ac repraesentatio, fallatur, falleretur autem si ferretur in monadas non existentes, tanquam existentes. At si verum est Deum id non potuisse, non video cur magnopere laudanda sit sapientia divina in delectu et compositione harum rerum cum illis. Electa enim semel minima quacumque monade, quam produceret, necessitabatur Deus reliquas omnes producere, sicut necessitatur non decipere creaturas rationales, aut non infundere illis errorem, aut sicut necessitatur promissis suis attemperare eventum.

Prodiit anno postremo Opus insigne defuncti nuper Archiepiscopi Cameracensis, in quo dum Totam Jansenii doctrinam strictissime disertissimeque convellit et radicitus evertit, se ipse superasse mihi visus est. Inscriptio libri haec est: Instruction Pastorale de Monseigneur l'Archeveque de Cambrai au Clergé et au peuple de son diocese en forme de dialogues divisée en trois parties. *Premiere partie* qui developpe le systeme de Jansenius, sa conformité avec celui de Calvin sur la delectation et son opposition à la doctrine de S. Augustin. *Seconde partie* qui explique les principaux ouvrages de S. Augustin sur la grace, l'abus que les Jansenistes en font et l'opposition de leur doctrine à celle des Thomistes. *Troisieme partie* qui montre la nouveauté du Systeme de Jansenius et les consequences pernicieuses de cette doctrine contre les bonnes moeurs.

Inter innumeros libros ac libellos circa nuperam adversus Propositiones Quenellii Bullam ultro citroque editos maximam a peritis approbationem tulit is cui titulus: Lettres d'un Abbé à un Eveque où l'on demontre l'équité de la Constitution Unigenitus etc. et qui peuvent servir de Response aux libelles qui ont paru contra cette Constitution. Vale vir illustrissime iterumque vale. Dabam Coloniae 6 Aprilis 1715.

Illustrissime Dominationi TUae

Devotissimus

Bartholomaeus Des Bosses

monads have their perceptions from their own stores, so to speak, and without any physical influence of one on another, and, further, if the perceptions of each monad correspond precisely to all the other monads that God has already created and to their perceptions, and the perceptions are regulated by representing them, then God could not have created any of those monads that exist in this way without producing all the others that now exist in the same way. For God can in no way bring it about that the natural perception or representation of monads is mistaken, but it would be mistaken if it presented nonexistent monads as if they existed. But if it is true that God could not have done this, I do not see why divine wisdom is to be praised so highly in the selection and arrangement of the latter monads with the former. For once the least such monad was chosen to be produced, it was necessary that God produce all the remaining monads, just as it is necessary that he not deceive rational creatures or fill them with error, or just as it is necessary that he regulate any event in keeping with his promises.

Last year a remarkable work appeared from the recently deceased archbishop of Cambrai, in which he precisely and skillfully annihilated the whole of Jansen's doctrine and destroyed it at its roots; he seems to me to have surpassed himself. The title of the book is this: *Pastoral Letter from Monsignor, the Archbishop of Cambrai, to the clergy and to the people of his diocese in the form of dialogues divided into three parts. The First Part, which develops the system of Jansen, its conformity with that of Calvin on rapture, and its opposition to the doctrine of St. Augustine. The Second Part, which explicates the principal works of St. Augustine on grace, the abuse that the Jansenists make of it, and the opposition of their doctrine to that of the Thomists. The Third Part, which shows the novelty of the system of Jansen and the pernicious consequences of this doctrine for good morals.*⁴

Among the innumerable books and pamphlets published on both sides of the Alps concerning the recent bull against the propositions of Quesnel, the one receiving the most praise from experts is titled *Letters from an Abbot to a Bishop, in which the fairness of the bull Unigenitus is shown and which can serve as a response to the libels that have appeared against this bull.*⁵

Farewell, most distinguished Sir, and again farewell. From Cologne 6 April 1715.

Your Excellency's most devoted
Bartholomew Des Bosses

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Non aspernanda sunt quae respondit D. Hartsoekerus, nondum tamen extra dubium rem collocant, itaque fortasse non inutile erit instare per replicationem adjunctae similem. Interea plane Tecum sentio si quid mutet situs adversus in operatione Magnetis, fortasse accuratiore instrumento sensibile reddi posse, etsi in limatura ferri non sentiatur.

Acutae solent esse objectiones Tuae mihique semper sunt gratae. Si qua detur Unio Realis, realisans vel potius substantialisans phaenomena, quaeris quid efficiat mutationes in ipso corpore. Respondeo cum corpus si pro substantia habeatur, nihil aliud esse possit, quam quod ex Unione Reali Monadum resultat, resultabunt inde etiam modificationes quas habebit monadum mutationibus respondentes, et fient hactenus quae vulgo docentur. Monades influunt in hoc realisans, ipsum tamen in ipsarum Legibus nil mutabit, cum quicquid modificationum habet ab ipsis habeat quasi Echo, naturaliter scilicet, non tamen formaliter seu essentialiter, cum Deus ei tribuere possit quae Monades non dant, aut auferre quae dant. Quae contra proferri possunt valebunt omnia in communem doctrinam substantiae corporeae, seu in id omne quod substantiale Monadibus superaddi potest. Sane si quid in corpore est substantiale praeter Monades, suarum propriarum modificationum capax esse debet, easque habebit naturaliter pendentes a monadibus quas unit, supernaturaliter a Deo, qui ab ipsis disjungere potest. Itaque cum ais debere aut a Deo per miraculum perpetuum habere modificationes suas, aut a Monadibus; dico a Monadibus habere naturaliter et plerumque; a Deo miraculose et raro qui poterit efficere ut monadibus respondeat prius non suis. Si quod vinculum Reale possibile est oportet ut possibilis sit unitorum in ipsum influxus, alioqui non erit cur vinculum eorum dici possit. Caeterum non opus erit poni nisi in corporibus quae habent *Monadem dominantem*, seu quae sunt unum per se ut organica et huic semper adhaerebit Monadi.

Altera objectio haec est: Si Monades omnes ex propria penu, ut sic loquar, et sine ullo physico unius in aliam influxu perceptiones suas habent, si praeterea cujuslibet Monadis perceptiones caeteris quae nunc a Deo creatae sunt Monadibus earumve perceptionibus praecise respondent non potuit ergo Deus ullam ex his quae nunc existunt Monadibus creare, quin

66. Leibniz to Des Bosses¹

[Hanover, 29 April 1715]

Most Reverend Father, Most Honored Supporter,

Mr. Hartsoeker's response should not be dismissed, even though it does not yet settle the matter beyond doubt, and so it will perhaps be worthwhile to follow up by resending the enclosed in a similar way.² In any case, I agree fully with you that, if anything changes in the operation of a magnet when it is in the opposed position,³ it could perhaps be rendered sensible with a more accurate instrument, even if it is not detected in iron filings.

Your objections are usually sharp, and I am always thankful for them. If there were a real union, realizing or rather substantializing phenomena, you ask what would bring about changes in the body itself. I reply that, since body, if it is to be considered a substance, can be nothing other than that which results from a real union of monads, from this, too, will result the modifications it will have corresponding to the changes of the monads; and to this extent what is commonly taught will be the case. Monads will influence this realizing thing, but it will change nothing in their laws, since whatever modifications it has, it has from them like an echo, that is, naturally, but not formally or essentially, since God can attribute to it what monads do not give it or remove what they give it. Everything that can be brought against this view will be applicable to the common doctrine of corporeal substance, that is, to everything substantial that can be super-added to monads. Clearly, if there is something substantial in body besides monads, it must be capable of its own modifications; and it will have these modifications naturally, depending on the monads that it unites, and supernaturally, depending on God, who can separate it from the monads. Thus, although you say it must have its modifications either from God through a perpetual miracle or from monads, I say it has them from monads naturally and for the most part, and miraculously and rarely from God, who could bring it about that it corresponds to monads not previously its own. If that real bond is possible, it should be possible for there to be an influence of the unities on it; otherwise there will be no reason why it can be called the bond of them. Furthermore, it will not be necessary to posit it except in bodies that have a *dominant monad*, or that are per se unities, like organic bodies, and it will always adhere to this monad.⁴

The other objection is this: if all monads have their perceptions from their own stores, so to speak, and without any physical influence of one on another, and, further, if the perceptions of each monad correspond precisely to all the other monads that God has already created or to their perceptions, then God could not have created any of those monads that now

alias omnes conderet etc. Responsio est facilis et dudum data. Potuit absolute, non potuit hypothetice, ex quo decrevit, omnia sapientissime agere et ἀμυνικωτάτως. Deceptio autem creaturarum rationalium nulla foret, etsi phaenomenis earum non omnia, extra ipsas exacte responderent, immo si nihil: veluti si mens aliqua sola esset; quia omnia perinde evenirent, ac si essent alia omnia, neque illa cum ratione agens sibi damnum accerseret. Hoc enim est non falli. Ut autem iudicium probabile quod formaret de existentia aliarum Creaturarum, verum esset, non magis necessarium foret, quam necesse fuit ut terra quiesceret quia paucis exceptis totum genus humanum ita merito olim iudicavit. Non igitur ex necessitate, sed ex sapientia Dei fit, ut iudicia ex maxime verisimilibus post plenam discussionem formata sint vera.

Nihil ab Archiepiscopo Cameracensi prodiit, quod non magnum ejus et singulare ingenium redoleret. Sed vellem facti infallibilitatem contra Bel-larmini et tot aliorum magnorum virorum sententiam defendere non tentasset. Volui aliquando ipse per me penetrare in intima Jansenii sensa, sed tot alia agenda et meditanda non permisere. Quod superest vale et fave. Dabam Hannoverae 29 Aprilis 1715.

Deditissimus

G. G. L.

P.S. Exemplum Theodicaeae meae in Gallia editae in duodecima quam vocant forma, nuper nescio cujus missu ex Batavis accepi. Suspicio R^{mi} Patris Turnemini munus esse: cui gratias debeo, et ut meo nomine per occasionem agas peto.

Leibniz to Des Bosses

Reverendissime Pater

Fautor Honoratissime

Diu jam praeclarum laborem Tuum apud me servo, et de die in diem distuli, quod aegre ea quae ad me pertinent relego: tandem mihi ipsi vim feci et Tuam versionem perlegi studiose. Visa est elegans, ingeniosa, saepe melior originali. Quia tamen, ut fidus interpres Gallico strictius institeras; quod ratione nescio quid Latino subinde haerere videbatur, unde versionem

exist without having produced all the others, etc. The response is easy and has already been given: he could absolutely, but not hypothetically, because he decided to act always most wisely and most harmoniously. Still, there would be no deception of rational creatures, even if not everything outside of them corresponded exactly to their phenomena, indeed even if nothing did, as if there were just one mind; for everything would come about as if all the other things existed, and this mind, were it acting reasonably, would not invite blame on itself. For this is not to err. Nevertheless, it would be no more necessary that the probable judgment it formed of the existence of other creatures be true than it was necessary that the Earth stood still, because with a few exceptions the entire human race once judged it so with good cause. Therefore, it is not out of necessity, but from the wisdom of God, that judgments of the greatest probability, formed after a full examination, are true.

Everything published by the archbishop of Cambrai gave evidence of his great and singular mind.⁵ But I wish that he had not tried to defend the infallibility of fact against the opinion of Bellarmine and so many other great men. I myself wanted someday to penetrate the innermost meaning of Jansen, but so many other things that must be done and must be considered have not allowed me to do so. For the rest, farewell and think kindly of me. From Hanover, 29 April 1715.

Most faithfully,

G. W. Leibniz

P.S. I received a copy of my *Theodicy*, which was published in France in the form they call duodecimo.⁶ It was sent to me from Holland by an unknown person. I suspect this is the work of the Most Reverend Father Tournemine; I owe him thanks, and I ask that you thank him for me when you have the chance.

67. Leibniz to Des Bosses¹

[Hanover, 30 June 1715]

Most Reverend Father, Most Honored Supporter,

For some time now I have kept your excellent work with me, and each day I have procrastinated, because I dislike rereading things that belong to me. Finally, I forced myself, and I read through your translation carefully. It seemed elegant, clever, often better than the original. Yet because, as a faithful translator, you stuck rather closely to the French, from time to time something or other seemed awkward in the Latin that made it appear to be

esse appareret, putavi mihi auctori libertatem datam, quam alius sibi non aequè sumeret, passim mutandi phrasim sensaque ipsa, ut Latinum ad authenticum speciem propius admoveretur.

Fuit hic apud me Dn. Cornelius van den Driesch Coloniensis, ex vestro ordine egressus, qui TE imprimis colit. Misit ad me carmina sua pleraque non contemnenda.

Quid agit R. P. Orbanus? Spero vivere et aura vesci. Quid respondit Dn. Hartsoekerus? Vellem Eminentissimum Ptolemaeum satis otii in purpura nancisci, ut purpuratum scriptorem quem sibi perficiendum sumpserat, Bellarminum, inquam, absolvere possit.

Quid Sinenses? An novissimum Romae decretum ferre poterunt? Ego, ut verum fatear, Romanae Curiae consilia interdum magis miror quam intelligo.

An novissima mea responsio περὶ τῆς ἐνώσεως τῶν μονάδων Tibi placuerit, haud scio. Vereor ne quae diversis temporibus hac de re ad TE scripsi non satis bene cohaereant inter se, quoniam scilicet hoc argumentum de phaenomenis ad realitatem evehendis, seu de substantiis compositis non nisi per occasionem Tua[ru]m literarum tractavi.

Theodicaeae meae in Galliis editae exemplum nescio cuius missu accepi; et plurimum R. Patri Tournemino debeo, cuius favore hoc contigit, ut libellus ille mens in Gallia magis nosceretur. Sunt ibi viri aliquot egregii quibus meum systema non parum probatur. Vellem vacares mihi redigere totam meam Metaphysicam in disciplinae formam, ad eum modum quo Theodicaeam sub finem brevi libello Latino methodice tractavi, quod tum demum rite fit, cum totam tractationis formam in Tabula spectandam exhibere licet.

Quod superest vale et favore. Dabam Hanoverae 30 Junii 1715.

Deditissimus

G. G. Leibniz

Des Bosses to Leibniz

Illustrissime Domine Patrone Colendissime

Sero accepi, serius mitto Clarissimi Hartsoekeri responsionem, τὰς δευτέρας πὼς φροντίδας σοφωτέρας.

a translation. For this reason I judged that a freedom was given to me as author, which another might not have assumed for himself to the same degree, of changing a sentence and the meaning itself here and there, so that the Latin would be brought nearer to the idea of the original.

Mr. Cornelius van den Driesch of Cologne has been here with me; he is a former member of your order, who esteems you most highly. He has sent me his poems, many of which are not to be disparaged.²

How is the Reverend Father Orban? I hope he is alive and enjoying the summer. What did Hartsoeker say in response? I wish that the most eminent Tolomei might find enough leisure in the office of cardinal that he could complete the work of the cardinal whose undertaking he has assumed for himself, I mean Bellarmine.³

What of the Chinese? Could they have sent any new decrees to Rome? I truly confess that I am amazed by plans in the Roman curia more than I understand them.

I scarcely know whether my latest response concerning the unification of monads⁴ will have pleased you. I fear that the things I have written you at different times on the subject may not agree well enough with one another, since I certainly have not treated this argument concerning the raising of phenomena to reality, that is, composite substances, except on the occasion of your letters.

I received from an unknown person a copy of the French edition of my *Theodicy*. I owe a great deal to Tournemine, for it was as a consequence of his praise that my little book became better known in France. There are some outstanding men there among whom my system is quite highly regarded. I wish you had time to reduce my entire metaphysics for me to the form of a textbook; I treated the *Theodicy* methodically in this way in a short Latin tract at the end, since at that point it became permissible finally to lay out the entire form of the argument to be examined in a table.⁵

For the rest, farewell and think kindly of me. From Hanover, 30 June 1715.

Most faithfully,
Gottfried Wilhelm Leibniz

68. Des Bosses to Leibniz¹

[Cologne, 20 July 1715]

Most Distinguished Sir, Most Esteemed Patron,

I received late and am sending even later the response of the excellent Hartsoeker; "second thoughts are, I suppose, wiser."²

Ut aliquid ad postrema Tua reponam: Tecum sentio si quod in corpore vinculum reale a monadibus plusquam modaliter distinctum detur aut possibile sit, oportere ut detur aut possibilis sit unitorum in ipsum influxus, alioquin, ut ais, non erit cur vinculum eorum dici possit. Sentio pariter opus non esse ut vinculum illud ponatur nisi in corporibus quae habent monada dominantem seu quae sunt unum per se, ut organica, cui monadi seu toti semper adhaereat vinculum. Monades ergo influunt in illud realizans, ipsum tamen in illarum legibus nihil mutabit, cum quidquid modificationum habet, ab illis habeat quasi Echo, ut tute ipse explicas.

Verum ex his ipsis colligere posse videor quod vinculum illud quantumvis reale non possit esse substantiale. Substantiale enim (saltem quod modale non est) statuis esse virtutem sive principium actionis quod non videtur convenire reali illi vinculo, cujus modificationes se habent instar Echus. Porro si semel detur vinculum illud non esse substantiale, confecta res est, et plana ad explicandam μετουσίωσιν via sternitur. Nec video cur possibile non sit reale aliquod, quod substantiale non sit. Si autem possibile est, a Deo utique in rerum productione neglectum non est, ne vacuum formarum, ut vocant, admittamus.

Ad alterius argumenti mei solutionem, mihi non improvisam, duo rehero.

Ac primo quidem, etiam praescindendo a Dei existentia sapientiaque videmur judicare posse plusquam probabiliter, quod creaturae aliae a nobis existunt.^{DB1} Memini me olim communicasse tecum aliquas propositiones nostris in scholis prohibitas a Michaelae Angelo Tamburino qui hodie Societati nostrae praeest. Earum aliquas ad rem praesentem facientes juvat hic subijcere.

1^a Mens humana de omnibus dubitare potest ac debet, praeterquam quod cogitet.

2^a Reliqua non prius nobis certa et explorata esse possunt, quam clare innotuerit Deum existere, summeque bonum esse, non fallacem qui mentem nostram inducere in errorem velit.

3^a Ante certam notitiam divinae existentiae dubitare semper quisque posset ac deberet, an non talis naturae conditus fuerit ut in omni iudicio

DB1. IN MARGIN: An enim Atheum negabis habere scientiam existentiae sui corporis?

To bring up something in your last letter,³ I agree with you: if any real bond in a body is, or may possibly be, more than modally distinct from the monads, then it will have to be the case that there is, or may possibly be, an influence of the unities on it; otherwise, as you say, there will be no reason for it to be called their bond. Likewise, I think that it is not necessary that this bond be posited except in bodies that have a dominant monad, or that are *per se* unities, like organic bodies, in which the bond always adheres to this monad or to the whole. Therefore, the monads will have an influence on that realizing thing, but it itself will change nothing in their laws, since whatever modifications it has, it has from them as an echo, as you yourself explain.

But I seem able to conclude from these arguments that this bond, however real, could not be substantial. For you state that what is substantial (or at least what is not modal) is a power or a principle of action, which does not seem to apply to this real bond, whose modifications are regarded as an echo. Furthermore, if it is once conceded that this bond is not substantial, the issue is settled, and a clear way of explaining transubstantiation is opened. Nor do I see why it is not possible for something to be real that is not substantial. But if it is possible, it certainly was not something that God overlooked in the production of things; otherwise we would have to admit what is called a vacuum of forms.⁴

As for the response to my other argument, which was not unforeseen, I have two rejoinders.

First, even when we abstract from God's existence and wisdom, we seem to be able to judge it more than probable that created things other than us exist.^{DB1} I remember having sent to you a while back some propositions prohibited in our schools by Michelangelo Tamburini, who presides over our society today.⁵ It is helpful to set down here some of those that deal with the issue at hand.

1. The human mind can and should doubt everything except that it thinks.

2. Nothing else can be certain and settled for us before it has become known clearly that God exists and is supremely good, not a deceiver who wishes to lead our mind into error.

3. Prior to the certain knowledge of divine existence, each person can and should always doubt whether he has not been created with such a na-

DB1. IN MARGIN: For will you deny that an atheist has knowledge of the existence of his own body?

suo fallatur, etiam in iis quae certissima et evidentissima ipsi apparent.

5^a Non nisi per fidem divinam certo cognoscere quisquam potest quod aliqua extent corpora, ne suum quidem.

2^{dum} pertinet ad sapientiam divinam de qua aliquid in argumento meo obiter innuebam, quod non observasti, intactum certe reliquisti. Hoc ut explicem quaero an sit possibile nec ne systema quodpiam praesenti mundo quoad omnia phaenomena simile, in quo substantiae agant in se mutuo? Si negas, ostende implicantiam; si ais, jam sic argumentor: Convenientius divinae sapientiae fuisse videtur, hujusmodi systema eligi prae altero ex meris monadibus in se invicem non influentibus composito. Ergo Deus revera illum, non hunc condidit. Consequentia tenet in principiis Tuis: antecedens vero sic suadeo: In systemate Harmoniae praestitutae tota divinae sapientiae Architectonicae ratio (saltem si in naturalibus haereamus) consistit in delectu materiae operis; in systemate autem communi versatur etiam circa operis formam ac compositionem a delectu ipso materiae distinctum, ita ut dici possit: *Materiam superabat opus*. Atqui hoc postremum praestantius et infinita sapientia dignius videtur. Quod ut exemplis illustrem: Quaero rursus: Uter Architectus majorem in arte sua sapientiae laudem merebitur; an is cujus ars tota staret in eo quod lapides non modo quadros dumtaxat deligeret, sed etiam ita sibi mutuo ex natura sua attemperatos, ut eo ipso quo locum in unum comportantur sine ulteriori architecti aut fabri industria magnificentissimum ex iis palatium exurgeret, uti ad Amphionis lyram Thebanos muros extitisse narrant poetae; an potius ille qui ex saxis natura quidem sua rudibus, nec ita harmonice sibi respondentibus sed ab artifice aptatis, et loco ac tempori attemperatis aequae pulchrum palatium construeret? Aliud exemplum: uter poeta cedro dignior? an qui poema conflaret e meris V.G. dactylis ita constitutis, ut hoc ipso quo in cartam conjicerentur simul, pulcherrimum melos exhiberent; an potius ille qui Homeri aut Maronis instar materiam rudem adhuc et indigestam industria sua in formam redigeret elegantia et proportionem non imparem priori?

Unum addo pro auctario: Monades illae, quae ex propria penu et sine physico unius in aliam influxu habent omnes modificationes suas, gratis poni videntur perinde ac gratis poneretur aliqua qualitas scholastica cujus

ture that he is deceived in all his judgments, even in those that appear most certain and most evident to him.

5. Only through divine faith can anyone know with certainty that any bodies exist, even his own.

The second rejoinder pertains to divine wisdom, about which I suggested something in passing in my argument that you did not see and clearly left untouched. In order to explain this, I ask whether or not it is possible for there to be a system similar to the present world as far as all the phenomena are concerned in which substances act mutually on each other. If you deny this, show how it follows; if you say that it is possible, then I draw the following conclusion: it seems that it was more fitting to divine wisdom that a system of this kind be chosen over another composed out of mere monads that do not have any influence on one another. Therefore, God in fact created that world, not this one. The consequence holds by your principles. I argue for the antecedent as follows: in the system of preestablished harmony the entire basis of the architectonic of divine wisdom (at least if we stick to natural things) consists in the choice of the matter of the work; but in the common system it concerns also the form and composition of the work, distinct from the choice itself of the matter, so that it could be said, "The workmanship surpassed the matter."⁶ And the latter seems more excellent and more worthy of infinite wisdom. Now, so that I may illustrate this with examples, I ask again: Which architect will deserve greater praise for the wisdom in his art, he whose complete art consisted in this, that he simply picked out the stones that were not only already square but also so naturally fitted to one another that by the very fact that they were gathered in one place, without a further architect or the industry of a worker, the most magnificent palace arose from them, as the poets tell of the Theban walls rising by the lyre of Amphion;⁷ or rather he who, from large stones, naturally rough and not proportioned to each other, but adapted by artifice and coordinated in time and place, built an equally beautiful palace? Another example: Which poet is more worthy of immortality, he who composed a poem, for example, from pure dactyls so arranged that, from the very fact they were placed on paper at the same time they produced very beautiful sounds; or rather he who, like Homer or Virgil, by his industry reduced the previously rough and confused matter to a form with an elegance and proportion not inferior to the previous case?

I add one ancillary point. It seems gratuitous to posit these monads, which have all their perceptions from their own stores and without a physical influence of one on another, just as it would be gratuitous to posit

natura esset produci et producere omnes effectus V.G. caloris independenter a mechanismo, et concursu reliquorum corporum ambientium etc. cujusmodi qualitatis philosophi recentiores exhibere solent. Sed de his hactenus.

Aveo intelligere quid sperandum sit de editione Operis Tui Historici et an auctarium illius futura sit dissertatio de Joanna Papissa?

Scribit ad me Turnaminus noster, neminem hactenus extitisse in Gallia qui adversus Theodicaeam aliquid proferret.

Jussus sum a majoribus in latinam linguam convertere librum non adeo magnum cui titulus: Lettres d'un Abbé à un Eveque où l'on demontre l'équité de la constitution *Unigenitus* etc., et qui peuvent servir de reponse aux libelles qui ont paru contre cette constitution. Autor illius fertur esse Pater *Alemannus* noster. Versio jam confecta nundinis proximis Francofurtensibus lucem videbit.

Elaboratur Parisiis liber magni momenti in refutationem Hexaplorum Quesnelli, constans duobus tomis in 4°.

Item colliguntur in unum mandata pastoralia omnium Episcoporum Galliae hactenus edita circa propositiones Quesnellianas. Vale vir Illustrissime. Dabam Coloniae 20 Julii 1715.

Illustrissimae Dominationi tuae

Devotissimus

Bartholomaeus Des Bosses

Leibniz to Des Bosses

R^{me} Pater Fautor Honoratissime

Acutae sunt instantiae Tuae, atque ideo cum voluptate ad eas respondeo, nam et me docent et rem illustrant. Incipiam a parte posteriore. Maxima verisimilitudine judicamus nos non solos existere, non tantum ex principio Divinae Sapientiae, sed etiam ex principio illo communi quod passim inculco, quod nihil fit sine ratione, nec ratio apparet, cur tot possibilibus aliis nos soli praeferamur. Alia autem quaestio est an corpora sint substantiae. Licet enim corpora substantiae non essent tamen omnes homines proni erunt ad judicandum corpora esse substantias, ut omnes proni sunt ad judicandum tellurem quiescere, etsi revera moveatur.

some Scholastic quality whose nature it would be to be produced and to produce all the effects, for example, of heat, independently of mechanism and the collision of the rest of the surrounding bodies, etc. This is the kind of quality that modern philosophers usually hiss at. But enough of these things.

I am eager to know what we can hope for in connection with the publication of your historical work and whether anything further is going to happen with the dissertation on the popess Joan.⁸

Our Tournemine wrote to me that so far no one has appeared in France who is publishing anything against the *Theodicy*.

I have been asked by many people to translate into Latin a book that is not very long, entitled *Letters from an Abbot to a Bishop, in which the fairness of the bull Unigenitus is shown and which can serve as a response to the libels that have appeared against this bull*.⁹ The author of this book is reported to be our Father Alemanni. The translation, which is now finished, will appear at the next Frankfurt book fair.

In Paris a book of great importance is being prepared as a refutation of the *Hexaples* of Quesnel; it consists of two volumes in quarto.¹⁰

In addition, the pastoral letters that have been published so far by all the French bishops concerning the propositions of Quesnel are being collected into one book.¹¹ Farewell, most distinguished Sir. From Cologne, 20 July 1715.

Your Excellency's most devoted
Bartholomew Des Bosses

69. Leibniz to Des Bosses¹

[Hanover, 19 August 1715]

Most Reverend Father, Most Honored Supporter,

Your criticisms are shrewd, and so I respond to them with pleasure, for they both teach me and illuminate the matter. I shall begin with the latter part [of your reply]. We judge with the greatest probability that we do not exist alone, not only from the principle of divine wisdom, but also from that common principle upon which I generally insist: that nothing happens without a reason; and there does not appear to be a reason why we alone should be preferred over so many other possible beings. But it is another question whether bodies are substances.² For even if bodies were not substances, nonetheless all men will be inclined to judge that bodies are substances, just as they are all inclined to judge that the Earth is at rest, even though it is really in motion.

Propositiones a praeposito generali Tamburino prohibitas mihi a TE communicari non memini, hae quas nunc communicas, videntur Cartesio oppositae, et mihi satis probantur, quintam ponis, quartam omisisti. Omnes nancisci gratum erit. Honoratus Fabrius in Epistola quadam edita recensuit prohibitas tunc cum ipse floreret.

Non credo systema esse possibile, in quo Monades in se invicem agent, quia non videtur possibilis explicandi modus. Addo et superfluum esse influxum, cur enim det monas monadi quod jam habet? Nempe haec ipsa natura substantiae est ut praesens sit gravidum futuro; et ut ex uno intelligi possint omnia, saltem ni Deus miraculo intercedat.

Ad similitudinem Tuam fateor majori arte agere architectum qui lapides recte componat, quam qui lapides tam doctos aliunde nactus sit, ut ipsi tantum comportati semet in ordinem redigant. Sed vicissim credo fatebere, infinities artificiosiore fore architectum, qui lapides tam doctos fabricare possit.

Addis pro auctario: monades quae ex propria penu habeant modificationes poni gratis, ut gratis ponitur calor agens sine mechanismo. Hoc non auctarium est, sed primum. Si ita sentis nobis ad initia redeundum est, quasi nihil scripsissem. Caeterum monades omnia ex penu sua ducunt, non ut calor scholasticus, ἀπρῆτως suos effectus producit, sed mechanismo quodam eminente, ut sic dicam, qui fundamentum est et concentratio mechanismi corporei, ita ut modus quo unum ex aliquo sequitur explicari possit.

Haec merito praemisi, nam si nullae sunt monades, quales concipio, frustra de earum vinculo deliberamus. Nunc ad quaestionem venio, utrum hoc vinculum, si datur, sit aliquid substantiale. Ita mihi visum est, et alioqui inutile iudico, quomodo enim alias substantiam compositam faciet, cujus gratia unice introducit? Sed objicis *primo* non esse principium actionis, cum sit instar Echus. Respondeo etiam corpus Echo reddens est principium actionis. Hoc vinculum erit principium actionum substantiae compositae; et qui eam admittit (ut facit ni fallor omnis schola) etiam hoc vinculum admittet. Nonne schola hactenus principia substantialia compositi unum per se constituentis agnovit per quae partes uniantur? Cur ergo nobis negaret?

I do not recall your having sent me the propositions prohibited by Superior General Tamburini; the ones that you send now seem opposed to Descartes, and I approve of them well enough. You quoted the fifth proposition, but omitted the fourth. I should be grateful to receive them all. Honoré Fabri, in some published letters, reviewed the prohibitions in effect when he was active.³

I do not believe that a system is possible in which monads act mutually on each other, since there seems to be no possible way to explain this. I add that the influence is also superfluous, for why should a monad give to a monad what it already has? Certainly, it is in the very nature of substance that the present is pregnant with the future, and that everything can be understood from one thing, at least unless God intervenes with a miracle.

In response to your analogy, I admit that an architect who arranges stones correctly acts with greater art than one who stumbles upon stones that were so well cut by another that, when merely collected, they impose an order on themselves. But, on the other hand, I believe you will admit that the architect who could make stones that were so well cut is infinitely more skillful.

You add as an ancillary point: monads that have their modifications from their own stores are posited gratuitously, as heat acting without a mechanism is posited gratuitously.⁴ This is not an ancillary point, but a primary one. If you think it is ancillary, we will have to go back to the beginning, as if I had written nothing. Besides, monads draw everything from their own stores, not as the Scholastic heat mysteriously produces its effects, but by a certain eminent mechanism, so to speak, which is the foundation and a concentration of corporeal mechanism, in such a way that it can be explained how one thing follows from another.

I presupposed this with good reason; for if there are no monads such as I conceive, we shall deliberate in vain about their bond. Now I come to the question whether this bond, if it exists, is something substantial. It seems so to me; otherwise I judge it to be useless; for how else will it make a composite substance, the one reason for which it is introduced? But you object, first, that it is not a principle of action, since it is like an echo. I respond that a body returning an echo is still a principle of action. This bond will be the principle of action of the composite substance; and he who admits this composite substance (as all the schools do, unless I am mistaken) will also admit this bond. Have not all the schools until now recognized substantial principles of a composite constituting a per se unity, through which parts are united? Why then deny it to us?

Ais non videre TE, cur non possit aliquid Reale esse, quod *substantiale* non sit. Hic forte de nomine litigamus. Potest *substantiale* dici quicquid modificatio non est, modificatio autem essentialiter connexa est ei cuius est modificatio. Itaque modificatio non potest esse sine subjecto, verbi gratia sessio sine sedente: potest tamen etiam aliter *substantiale* definiri ut sit *fons modificationum*. Hoc posito quaeri potest, an possit res dari, quae neque sit modificatio, neque fons modificationum, qualia accidentia Scholastici concipiunt, quae dicunt esse naturaliter in subjecto, non tamen essentialiter, cum per absolutam Dei potentiam possint esse sine subjecto. Sed nondum video quomodo tale quid explicari possit; si differt a meo vinculo substantiali, quod revera in subjecto est, non tamen ut accidens sed ut forma substantialis apud scholam, seu ut fons modificationum, licet per modum Echus. Itaque nescio an detur accidens praedicamentale realiter distinctum a subjecto, quod non sit accidens praedicabile; et an detur accidens praedicabile quod non sit modificatio; quemadmodum jam dubitavi an detur accidens praedicamentale distinctum a subjecto quod modificatio non sit. Nisi quis velit substantiale compositi accidens tale facere, quia non est fons primitivus, sed Echo. Sed ita nescio an sustinere possimus substantiam compositi, nisi velimus eam resultare ex accidentibus. Quomodo vero tunc possit a vobis explicari μετουσίωσις non video. Malim ergo dici superesse quidem non substantias sed species, eas autem non esse illusorias, ut somnium aut ut gladius ex speculo concavo in nos porrectus aut ut Doctor Faustus comedebat currum foeno plenum, sed vera phaenomena, id est eo sensu ut iris vel parelium est species, imo ut secundum Cartesianos, et secundum veritatem colores sunt species. Et potest dici Entia composita quae non sunt unum per se, seu vinculo substantiali (sive ut Alfenus Ictus in digestis more Stoicorum loquitur) uno spiritu non continentur, esse semientia; aggregata substantiarum simplicium; ut exercitum, domum, lapidem esse semisubstantias; colores, odores, sapes etc. esse semiaccidentia. Haec omnia si solae essent monades, sine vinculis substantialibus, forent mera phaenomena, etsi vera.

Porro hoc ipsum: *monades habere* vel tales habere Monades, est naturale quidem, non tamen essenziale, sed accidentale substantiae compositae. Nam fieri potest ut per absolutam Dei potentiam cesset esse Echo et

You say that you do not see why something cannot be real that is not “substantial.” Here perhaps we are quarreling over words. Whatever is not a modification can be said to be “substantial,” but a modification is essentially connected to that of which it is a modification. Thus, a modification cannot be without a subject, for example, sitting without a sitter. But “substantial” can also be defined in a different way, as “a source of modifications.” With this assumed, it can be asked whether there could be a thing that is neither a modification nor a source of modifications, such as the accidents the Scholastics conceive, which they say are naturally in a subject, but not essentially, since through the absolute power of God they could be without a subject. But I do not yet see how such a thing can be explained, if it differs from my substantial bond, which in fact is in a subject, though not as an accident, but as a substantial form according to the schools, that is, a source of modifications, though in the manner of an echo. And so I do not know whether there is a predicamental accident really distinct from the subject that is not a predicable accident, and whether there is a predicable accident that is not a modification, just as I have already questioned whether there is a predicamental accident distinct from the subject that is not a modification, unless someone claims that such an accident makes a substantial thing of the composite, since it is not a primitive source but an echo.⁵ And in the same way I do not know whether we can maintain the substance of a composite, unless we claim that it results from accidents. But, then, I do not see how you can explain transubstantiation. I should therefore prefer to say that no substances remain, only appearances, but that these are not illusory, like a dream, or like a sword pointing at us from a concave mirror, or like Doctor Faustus devouring a whole cart of hay; but rather they are true phenomena, that is, in the sense that a rainbow or parhelion is an appearance, indeed, in the sense that, according to Cartesians, and according to the truth, colors are appearances. And it can be said that composite entities that are not per se unities, or that are not held together by a substantial bond or (as the lawyer Alfenus, in the manner of the Stoics, says in his *Digests*)⁶ by one spirit, are semi-beings; aggregates of simple substances, like an army, a house, or a heap of stones, are semi-substances; colors, odors, tastes, and so on are semi-accidents. All these things, if there were only monads without substantial bonds, would be mere phenomena, though true.

Furthermore, *to have monads*, or to have such monads, is indeed natural to composite substance; yet it is not essential to it, but accidental. For it could happen that through the absolute power of God the echo ceases to be, and the monads are separated from the composite substance. Thus, if,

Monades ab ipsa separentur. Itaque si secundum Hypotheses vestras, vincula substantialia corporum organicorum seu per se unorum in pani et vino inclusorum, a Deo tollantur, relictis monadibus et phaenomenis; accidentia panis et vini supererunt, sed tanquam phaenomena, non illusione quadam, sed ita ut fieret ubique si nulla in natura essent vincula substantialia. Nam certe respectu harum monadum panis et vini res se perinde habebit ac si nulla vincula substantialia unquam in illis fuissent. Sed vincula substantialia monadum corporis Christi eum in vincula substantialia monadum corporis nostri influxum habebunt, quem alias in ea habuissent, vincula substantialia monadum panis et vini; et ita substantia corporis et sanguinis Christi a nobis percipietur. Nam vincula substantialia earum monadum erunt sublata, et post cessationem phaenomenorum panis et vini, seu species destructas, restituenda non quidem qualia fuerant, sed qualia prodissent si nulla fuisset facta destructio.

Vereor ne Dn. Hartsoeker aliquid de me suspicetur, quia ei locutus es de amico. Quod sequitur rogo ut Tuo nomine proponas in hunc vel alium si lubet sensum: L'experience que vous m'avés communiquée, Monsieur, est considerable et aisée[;] peutêtre pourroit on la pousser d'avantage, en mettant sur le carton une aiguille comme auparavant sur son pivot, mais non aimantée, et qui ne se soit encore approchée d'aucun aimant; pour voir si l'aimant quand il est dans sa situation naturelle attire plus aisement une telle aiguille, que lorsqu'il est dans une situation opposée. Car alors il ne s'agit que de la seule attraction de l'eguille, sans que sa direction y entre, puisqu'elle n'en a pas encore.

Annales mei procedunt non lento gradu. *Flores sparsi in tumulum Papissae* separatim edi possunt.

Praeclara Tua Theodicaeae versio in itinere versatur, jam enim Hildesiam misi, ut oblata occasione certa ad vos deferatur. Quod superest vale et fave. Dabam Hanoverae 19 Augusti 1715.

Deditissimus

G. G. Leibnitius

according to your hypotheses, the substantial bonds of organic bodies, that is, of the per se unities included in the bread and wine, are removed by God, while the monads and phenomena remain, the accidents of the bread and wine will remain, but only as phenomena,⁷ not by some illusion, but just as would occur everywhere if there were no substantial bonds in nature. For certainly with respect to these monads of the bread and wine everything will be just as if no substantial bonds had ever been among them. But the substantial bonds of the monads of the body of Christ will have that influence on the substantial bonds of the monads of our body which the substantial bonds of the monads of the bread and wine would otherwise have had on them; and thus the substance of the body and blood of Christ will be perceived by us. For the substantial bonds of the latter monads will have been removed, and after the cessation of the phenomena of the bread and wine, or the destruction of the appearances, they would not have to be restored as they had been but such as they would have appeared if there had been no destruction.

I am afraid that Mr. Hartsoecker suspects something about me, since you spoke to him of a friend. For this reason, I ask that you respond in your own name in this or another way that pleases you: "The experiment that you communicated to me, Sir, is important and simple; perhaps one could push it further by placing on the box a needle on its pivot as before, but a needle that is not magnetized and has not yet approached any magnet, to see whether the magnet attracts such a needle more easily when it is in its natural position than when it is in the opposite position. For then it concerns only the attraction of the needle alone without consideration of its direction, since it does not have one anymore."⁸

My *Annals* are progressing fairly well.⁹ *Flowers Scattered on the Grave of the Popess* can be published separately.

Your excellent translation of the *Theodicy* is on the way; I have already sent it to Hildesheim so that it may be given to you on a convenient occasion. For the rest, farewell and think kindly of me. From Hanover, 19 August 1715.

Most faithfully,
G. W. Leibniz

Creatura permanens absoluta, quaeque adeo neque est Actio-passio, neque relatio est

Unum per se seu *Ens plenum*

Substantia

Simplex,
Monas ut
Mentes,
Animae,
quae nulli
aliorum
creaturarum
influxui
obnoxiae
sunt

Composita, velut
Animal vel aliud
Organicum, quae
semper perstat, et
adhaeret Monadi
dominanti, sed ab
influxu aliarum
substantiarum
compositarum patitur.

Consistit in
*potentia activa et
passiva primitiva* seu
consistit in materia
prima, id est principio
resistentiae, et forma
substantialis, id est
principio impetus. Nam
sciendum est corporibus
revera vim novam non
dari, sed in iis existentem
tantum ab aliis
determinari seu
modificari: Et cum
corpus incurrit in aliud,

accidens vel *modificatio*

Monadis
quae oritur
ex propria
penu ejus et
consistit
unice in
perceptione
et appetitu

Substantiae
compositae
quae oritur ex
influxu earum
mutuo et
consistit in
*potentis activis
et passivis
derivatis*, cum
corpora concurrunt
secundum leges
motus; adeoque
in viribus et
resistentiis secundum
magnitudines et
figuras temperatis

Unum per aggregationem seu *Semites*, phaenomenon

Semisubstantia collecta ex
substantiis, ut chorus

Semiaccidens seu *species*
colligitur ex modificationibus
substantiarum, et est

Angelorum, exercitus hominum,
grex animalium, piscina, domus,
lapis, cadaver, quae sunt
comexione

destituta ut
grex strues
piscina
domus

secundarium seu *physicum*
(cujus ratio ex mechanismo-
occulto pendet) velut
accidens sensibile, color,
odor, sapor, item sympathia,
antipathia. Talis qualitas
rursus est

passiva seu
resistentia
per
magnitudinem
et figuram
verbo textuam
determinata

utraque
naturalia
arenae
cumulus,
mare, lapis
truncus arboris

passiva, ut
firmitas,
liquiditas,
asperitas,
malleabilitas

activa
impetus

activas ut
calor, frigus,
gravitas, vis
elastica

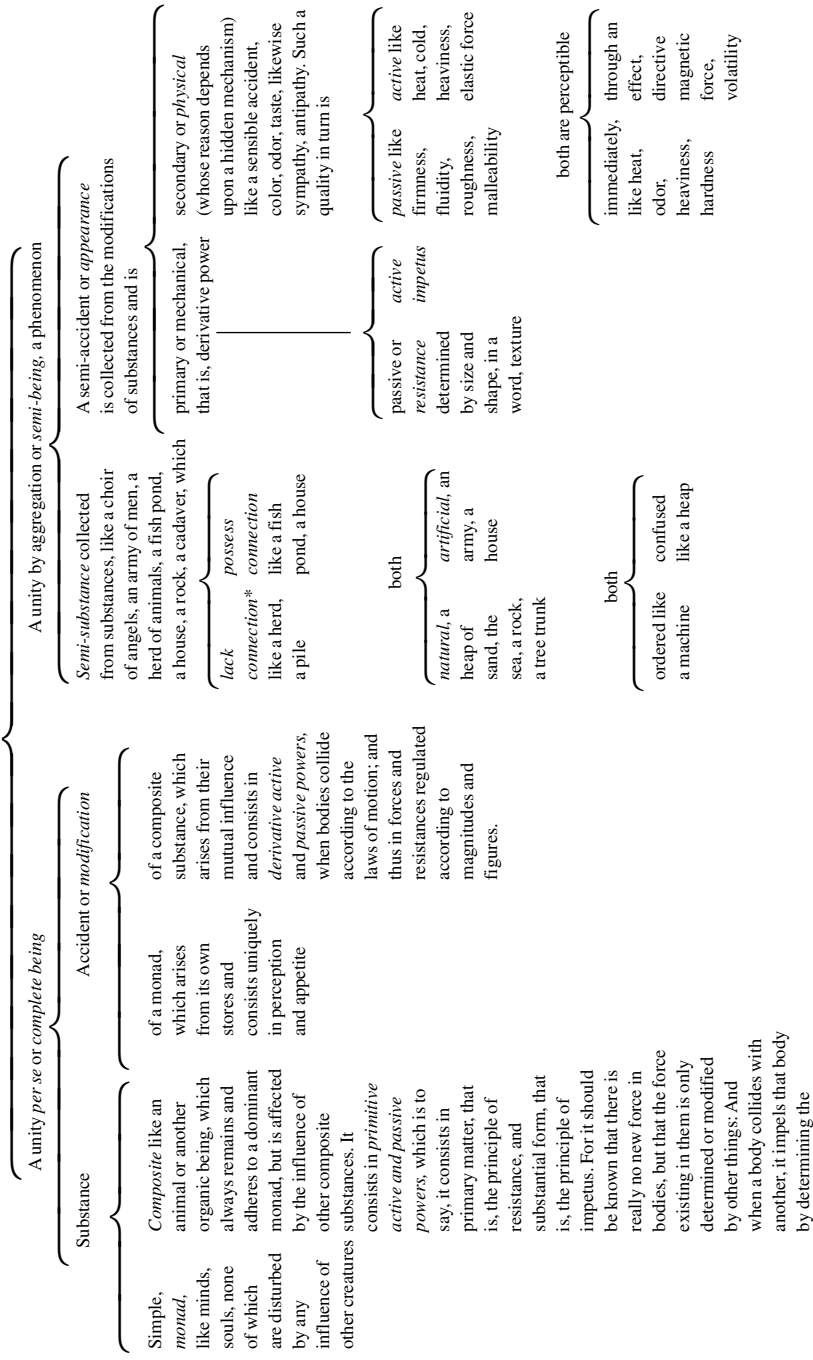
Utraque perceptibilis

immediate, per effectum
ut calor, vis
odor, magnetica
gravitas, directrix,
durities volatilitas

utraque
ordinata ut
machina
congeries

impellit ipsum
determinando vim
Elasticam inexistentem
a motu intestino ortam,
quemadmodum visibile
est si duae vesicae inflatae
aequales, aequali celeritate
concurrunt, ubi per
concursum rediguntur ad
quietem, et deinde per
insitam vim elasticam
resumunt motum. Idem fit
in omnibus concursibus,
neque enim natura unquam
agit per saltum, seu nullum
corpus momento transit a
quiete ad motum, vel a motu
majore ad minorem aut
contra: sed transit per
intermedia, et hoc fit ope vis
elasticae, seu motus insiti a
fluido permeante.

An absolute, enduring creature, which therefore is neither an action-passion nor a relation is



inherent elastic force
that arises from internal
motion, as can be seen if
two inflated balls of the
same size, colliding with
equal speed, are brought to
rest by a collision and then
resume moving by their
inherent elastic force. The
same thing happens in every
collision, for nature never
acts through a leap, that is,
no body passes in an instant
from rest to motion, or from
greater to lesser motion or
vice versa; rather, it passes
through intermediate steps,
and this is why there needs
to be elastic force, or internal
motion from a permeating fluid.

Note: This table was added by Leibniz to both the draft of the letter and the sent version.

* In the draft, Leibniz wrote "lack (possess) cohesion [*cohesione*]."

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Magnopere gaudeo TE valere et rem ut soles pulchre gerere. Ego literas Tuas accipiens commodum absolvi dissertationem de Theologia Sinensium Naturali, Gallico sermone conscriptam, in gratiam amici Galli viri insignis, nec partibus addicti; in qua de Deo, Spiritibus et anima humani ex Sinensium doctrina ago; utorque illis ipsis auctoritatibus, quas Nicolaus Longobardus ex vestro ordine, et Antonius de S. Maria Franciscanus attulere, ut Sinenses, etiam antiquos, Atheismi convincerent: in quo tantum abest ut successum habuerint, ut potius contraria omnia mihi verisimillima videantur. Quin Sinenses veteres ultra Graeciae Philosophos veritati accessisse, et docuisse videntur, materiam ipsam esse productionem Dei.

Illud etiam pergratum est quod scribis Dominum de Cochenheim versionem Germanicam operis suscepisse, quod Dominus Abbas de S. Petro Gallus illustris de pace perpetua stabilienda edidit et de quo sententiam etiam meam expetiit. Scripsi illi binas literas satis amplas, misique dissertationem quam olim de eodem argumento edidit Serenissimus Ernestus Hassiae Landgravius caput lineae Rheinfelsensis. Itaque credo Dn. de Cochenheim memoria veteris Domini (huic enim Principi initia fortunae debet) laborem in se recepisse. Occasione data eum officiosissime a me salutari peto.

Harduinianae Conciliorum editionis non vidi nisi conspectum, quo omissa Labbaeanae et accessiones novae editionis recensentur. Duodecim voluminibus constat. Gratias ago pro transmissione propositionum a Praeposito Generali Tamburino (qui nunc quoque ut arbitrator Societatem vestram regit) condemnaturum, et puto plerasque sic facile capi posse, ut notam mereantur. Vellem R. P. Fonseca Viennae fuisset, cum ego illic agebam. Saepe apud proceres, eosque dissidentes vestros Sinenses defendi in sermonibus convivalibus. Ego Lusitanicae Aulae opera maxime factum puto, ut curia Romana moderatius in eo negotio agat. Miror vestros jam rursus in Japoniam admitti. Oportet magnam illic factam animorum conversionem, post tantam ante annos non adeo multos acerbitatem. Itaque Historiam vestrae re-admissionis nosse velim.

Lamindum Pritanium non alium esse puto quam ill. virum Bernardum Trevisanum nobilem Venetum quem de bono sapore (del buon gusto) libellum edidisse et eodem nomine fictitio in hoc et aliis usum novi. Hart-

70. Leibniz to Des Bosses¹

[Hanover, 13 January 1716]

Most Reverend Father, Most Honored Supporter,

I am very happy that you are well and that as usual you are carrying on your affairs honorably. When I received your letter, I was just finishing the dissertation on the natural theology of the Chinese, written in French for the sake of a French friend, an extraordinary and unbiased man.² In it I consider the Chinese doctrines concerning God, spirits, and the human soul; and I use those very authorities whom Niccolò Longobardi of your order and Antonio de Santa Maria, a Franciscan, adduced in order to prove the Chinese, as well as the ancients, guilty of atheism.³ They were so far from succeeding in this that, instead, all the contrary propositions seem to me most probable. In fact, the ancient Chinese more than the philosophers of Greece seem to have come near to the truth, and they seem to have taught that matter itself is the production of God.

I am also very pleased that you write that Mr. von Cochenheim has undertaken a German translation of the work that the Abbé de Saint-Peter, the noted Frenchman, published concerning the establishment of perpetual peace, about which he also sought out my opinion.⁴ I wrote him two fairly long letters and sent the dissertation that his Highness Ernst, Landgrave of Hesse, head of the house of Rheinfels, published on this same subject.⁵ And in fact I believe that Mr. von Cochenheim took on this labor in memory of his old lord (for he owes the beginnings of his fortune to this prince). When the occasion arises, I ask that you give him my warmest regards.

I have only seen a prospectus for the edition of Hardouin's *Concilia* in which Labbe's omissions and the additions of the new edition are summarized. It consists of twelve volumes.⁶ Thank you for sending the propositions condemned by Superior General Tamburini (who, I believe, also directs your society now); I, too, think that most people could easily be convinced that they merit censure. I wish that the Reverend Father Fonseca had been in Vienna when I was there.⁷ I have often defended your dissenters in China in friendly talks with important men. I think the actions of the Portuguese court have been taken mainly so that the Roman curia would act more moderately in this affair. I am surprised that your order has been readmitted to Japan. A great conversion of souls must have occurred there after so much friction not so many years ago. And so I should like to know the story of your order's readmission.

I think that Lamindo Pritanio, who published a little book on good taste (*del buon gusto*), is none other than that distinguished man Bernard of Trevisi, a Venetian noble; I have noticed the use of the same fictitious

soekeri responsionem quam Te mittere ais addere oblitus es. Quoniam versionem libelli Gallici pro *Constitutione Unigenitus* adornare voluisti, credo libellum Tibi versione dignum visum. Ego putem rectissime facturos Romanos si dent explicationes tam diu desideratas, ita enim haerentibus satisfacient. Nunquam mihi censurae illae vagae placuere quibus percelluntur homines, non docentur. Et vereor ne Censurarum multitudine laboremus, quae praetextus saepe praebent vexandi viros bonos et doctos.

Elegans est locus Sforziae Pallavicini vestri, nondum credo Cardinalis, cum scriberet, quem mecum communicasti, et omnino ad sensum meum si vera esset Astrologia judiciaria, si Chiromantia, si, quas jactant quidam, Signaturae rerum; res ascribenda esset Harmoniae divinitus praestabilitae. In ipsa Theodicaea locum notavi P. Francisci Suarez de orationibus beatorum, quas successum habere putat per Harmoniam praestabilitam.

Expecto ab aula nostra facultatem mensem Junium Hagiographorum Antverpiensium (qui nobis adhuc deest) redimendi, quod Colonia optime fieri posse fixo pretio mihi Antverpia per amicum significatum est. Tunc etiam Juventium vestrum afferri curato, cujus dictionis elegantis alia specimina vidi. Ubi nunc degat nosse velim. Recte faciet, si quod operi deest ab initio Societatis suppleat. Spero et continuationem Bibliothecae vestrae Romae curante Bonanno tandem prodituram. Optarem indicem nancisci vestrorum nunc viventium qui scriptis editis noscuntur. Theodicaeam Latinam credo gratiorem illic fore ubi minor usus est Gallici sermonis; velut in media Germania in Italia atque etiam apud Anglos, ne quid de Hispanis dicam.

Fuit apud me aestate proxima Dominus Gerardus Cornelius van den Driesch qui notitia Tua imprimis (et sane merito) gloriabatur[:] aliquoties ad me literas dedit: melius eum nosse non ingratum foret. Vellem dari ipsi occasionem apud juvenem aliquem nobilem explicandi dotes suas. Quod superest vale et fave, et annum novum cum aliis multis laetus age. Dabam Hanoverae 13 Januarii 1716.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Philosophica peculiari scheda complecti volui; ac primum testor

name in this and other works.⁸ You forgot to include Hartsoeker's response, which you say you sent. Since you have decided to prepare a translation of the French pamphlet in support of the bull *Unigenitus*, I assume that the pamphlet seemed to you worthy of translation.⁹ I think that the Romans would be acting most correctly if they were to give the explanations that have so long been desired; for in this way they would satisfy those who adhere to the faith. Those vague criticisms that dishearten men have never pleased me, nor do they instruct us. And I fear that we are afflicted by a multitude of censors, who often make a show of vexing good and learned men.

The passage by your Sforza Pallavicino is elegant. I do not yet believe that when he wrote what you sent me the cardinal was wholly of my opinion: that if there were a true judicial astrology, or palmistry, or what some consider to be the signatures of things, this would have to be ascribed to a divinely preestablished harmony.¹⁰ In the *Theodicy* itself I noted a passage from Father Francisco Suárez concerning the prayers of the blessed, which he thinks have success because of preestablished harmony.¹¹

I expect to have the means from our court to purchase the month of June from the hagiographers of Antwerp (which we still lack); I was told by a friend in Antwerp that this could best be done in Cologne for the set price.¹² See to it as well that your Jouvenci, of whose elegant style I have seen some examples, is sent along.¹³ I should like to know where he now lives. He will do well if he supplies what is missing in the work about the beginning of the Society. I also hope that the continuation of your *Bibliotheca* will proceed at last with Bonann now attending to matters in Rome.¹⁴ I should like to obtain an index of all the members of your society now living who are known by their published writings. I believe that the Latin *Theodicy* will be more welcomed in those lands where there is little use of the French language, for example, in central Germany, in Italy, and even among the English, not to mention the Spanish.

Last summer Mr. Gerhard Cornelius van den Driesch, who was especially proud of your acquaintance (and with good reason), was staying with me; he has sent me letters on several occasions.¹⁵ It would be nice to know him better. I should like him to be given an opportunity to show his talents in the presence of some young nobleman. For the rest, farewell and think kindly of me. Be happy in this new year and for many years to come. From Hanover, 13 January 1716.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. I wanted to gather together the philosophical points on a separate

me rem quasi de integro considerasse sepositis quantum liceret praejudiciis; ita Tua jam perlustro.

Cum dico materiam esse indifferentem intelligo quod in ea pure passivum est. Elegans est Tua objectio circa indifferentiam temporis, quae enim sic ratio dabitur cur mundus tunc primum creatur. Ego fateor nullam esse, sed respondeo etiam nullum esse reale discrimen, nunc an mille ante annis creatus fingatur, cum tempus non sit nisi ordo rerum; non aliquid absolutum. Atque idem de spatio censeo. Eadem sunt, quorum discrimen a nemine, ne ab omniscio quidem, assignari potest.

Non bene memini quo argumento usus sim in Epistola Diario Gallico A.D. 1691 inserta pro stabiliendo discrimine Extensionis et materiae. Caeterum *extensionem* concipio ut ordinem coexistendi partium extra partes, qui per *distantias* explicatur seu magnitudinem viae brevissimae ab uno distantium ad aliud. Quaeris deinde utrum extensio sit modus corporis, an aliquid absolutum? Et posterius TIBI magis placet. Nam corpus consistere in inertia naturali, formaliter inextensum esse. Jam ut virtus activa non est modificatio rei passivae; ita extensio non erit modificatio rei per se inextensae. Hoc argumentum a simili hic non nisi ad verisimilitudinem valere ipse haud dubie agnoscis. Videamus an aliqua subsit sufficiens. Ac primum comparationi objici posse videtur; virtutem activam esse novam perfectionem, sed extensio seu positio partium extra partes potius imperfectio est, cum faciat rem obnoxiam destructioni naturali. Deinde materia seu passivum non exigit virtutem activam, ita ut materia naturaliter in virtutem activam prorumpat, nisi miraculo impediatur. Sed talis est materia, ut naturaliter habitura sit extensionem, nisi impediatur per Divinam Omnipotentiam. Unde etiam confirmari videtur, esse modificationem; nam nihil aliud substantia exigit quam sui modificationes. Denique si extensio nihil aliud est quam ordo secundum quem partes sunt extra partes, profecto nihil aliud est quam modificatio materiae. Extensionem concipere ut absolutum, ex eo fonte oritur quod spatium concipimus per modum substantiae, cum non magis sit substantia quam tempus. Itaque recte scholastici olim spatium sine rebus imaginarium dixere, qualis res est numerus sine re numerata. Secus sentientes in miras se indu-

sheet of paper; and at the outset I declare that I have considered the issue as if beginning anew, with prejudices set aside as much as possible. I now examine your points in this way.

When I say that matter is indifferent, I mean that which is purely passive in it. Your objection concerning the indifference of time is elegant; and in this way there indeed will be a reason why the world is created at the first moment. I myself acknowledge no such reason, but I also respond that there is no real distinction, whether one supposes that the world is created now or a thousand years earlier, since time is nothing but the order of things, not something absolute. And I think the same about space. Those things are the same between which no distinction can be assigned by anyone, not even an omniscient being.¹⁶

I do not remember clearly which argument I used in a letter inserted in the *Journal des savants* in 1691 for establishing the difference between extension and matter.¹⁷ In any case I conceive of *extension* as the order of coexistence of parts outside of parts,¹⁸ which is explained in terms of *distances*, that is, the magnitude of the shortest path from one of the distant things to another. Next you ask whether extension is a mode of body or something absolute. You prefer the latter. For body to consist in natural inertia is to be formally unextended. And, just as active power¹⁹ is not a modification of a passive thing, so extension will not be a modification of a thing that is unextended in itself. Doubtless you yourself recognize that this argument by analogy has only the force of probability. Let us see whether there is enough in it. First, it seems that it could be objected to the comparison that active power is a new perfection, whereas extension or the positing of parts outside of parts is rather an imperfection, since it makes a thing susceptible to natural destruction. Second, matter or that which is passive does not demand active power, in such a way that matter naturally gives rise to active power unless it is prevented by a miracle. But matter is such that it will naturally have extension unless it is prevented by divine omnipotence. And from this it seems to be established that it is a modification; for a substance demands nothing except its own modifications. Finally, if extension is nothing other than the order according to which parts are outside of parts, then it is indeed nothing other than a modification of matter. Conceiving of extension as an absolute thing arises from the fact that we conceive of space in the manner of a substance, when it is no more a substance than time. And thus the Scholastics long ago correctly said that space without things is something imaginary, like number without a thing numbered. Those who think otherwise lead themselves into amazing difficulties. I think it is no more true that extension remains

cunt difficultates. Sublatis monadibus manere extensionem non magis verum puto, quam sublatis rebus manere numeros.

Non video quomodo concipi possit realisans phaenomena esse extra substantiam. Nam istud realisans efficere debet, ut substantia composita contineat aliquid substantiale praeter monades, alioqui nulla dabitur substantia composita id est composita erunt mera phaenomena. Et in hoc me prorsus cum scholasticis sentire arbitror; eorumque materiam primam et formam substantialem, potentias nempe passivam et activam primitivas compositi et completum ex iis resultans; revera arbitror esse illud vinculum substantiale quod urgeo.

Cum dixi vinculum substantiale esse principium actionis compositi, objicis primo substantiam compositam sitam esse in monadibus substantialiter modificatis. Sed hoc non admitto, et quid est monades substantialiter modificari? Ego putem nihil modificari substantialiter. Et profecto cum verum substantiae indicium sit actio; nisi ipsa substantia composita, quatenus composita est, agit, non erit substantia composita, sed merum phaenomenon, nihil habens praeter monades et singularum modificationes; nulla invicem reali connexione, neque physica (quam dudum excludo) neque metaphysica quae fit per unionem. Objicis secundo vinculum substantiale esse principium resistantiae; ita est, nempe compositi, est enim ipsa ut sic dicam potentia passiva compositi. Sed ita inquires extensio erit principium resistantiae. Ego vero nego hoc sequi, extensio enim longissime differt a potentia passiva, cum nihil nisi situm exprimat ejus quod jam potentiam passivam habet. Ita candide dicere possum nihil esse in objectionibus istis quod memorari posse videatur. Et ex adverso non videre me quomodo substantia nova formaliter oriatur, nisi per nova quaedam substantialia attributa. Mea igitur doctrina de substantia composita videtur esse ipsa doctrina scholae peripateticae, nisi quod illa monades non agnovit. Sed has addo nullo ipsius doctrinae detrimento. Aliud discrimen vix invenies, etsi animum intendas.

Leibniz to Des Bosses

Reverendissime Pater, Fautor Honoratissime

Uti in Geometria interdum contingit, ut ex eo ipso quod supponitur aliquid esse diversum, inde non esse diversum consequatur; de quo genere ra-

when monads are removed than that numbers remain when things are removed.

I do not see how it can be conceived that the thing realizing phenomena is something apart from substance. For that realizing thing must bring it about that composite substance contains something substantial besides monads; otherwise there will be no composite substance; that is, composites will be mere phenomena. And in this I think that I am absolutely of the same opinion as the Scholastics; and, in fact, I think that their primary matter and substantial form, namely the primitive active and passive powers of the composite, and the complete thing resulting from these, are really that substantial bond that I am urging.

When I said that the substantial bond is the principle of action of the composite, you objected, first, that composite substance is located in the substantially modified monads. But I do not admit this, and what is it for monads to be modified substantially? I myself think that nothing is modified substantially. And, in fact, since the true mark of substance is action, unless composite substance itself acts, insofar as it is a composite, it will not be a composite substance, but a mere phenomenon, having nothing besides monads and modifications of the individual monads, with no real connection between them, either physical (which I excluded long ago) or metaphysical, which arises through a union. You objected, second, that the substantial bond is the principle of resistance. So it is, namely the principle of resistance of the composite, for it itself is, so to speak, the passive power of the composite. But you will say, then, that extension will be the principle of resistance. However, I deny that this follows, for extension differs very greatly from passive power, since it expresses nothing but the situation of that which already has passive power. Thus, I can say candidly that there seems to be nothing in these objections that can be asserted. And, against them, I do not see how a new substance may arise formally except through some new substantial attribute. Therefore, my doctrine of composite substance seems to be the very doctrine of the Peripatetic school, except that their doctrine does not recognize monads. But I add them, with no detriment to the doctrine itself. You will hardly find another difference, even if you are bent on doing so.

71. Leibniz to Des Bosses¹

[Hanover, 29 May 1716]

Most Reverend Father, Most Honored Supporter,

Just as it sometimes happens in geometry that from the very fact that something is supposed to be different, it follows that it is not different

tiocinandi apud Euclidem aliquando reperto, Cardanus, Clavius alique egere: Ita si quis fingat mundum creatum fuisse citius, reperiet non esse factum citius; quia tempus absolutum non datur, sed nihil aliud est quam ordo successionum. Eodem modo si quis fingat Totum universum loco moveri servatis omnium rerum inter se distantis, nihil actum erit; quia spatium absolutum aliquid imaginarium est, et nihil ei reale inest, quam distantia corporum; verbo, sunt ordines, non res. Tales suppositiones oriuntur ex falsis ideis. Itaque nisi aeternus sit mundus, quocumque tempore coepisse dicatur perinde est. Et nisi hoc statuamus, in absurdum incidemus, nec poterimus satisfacere arguentibus pro aeternitate mundi. Sequeretur enim Deum aliquid praeter rationem fecisse, neque enim possibile est rationem dari, hujus potius quam alterius temporis initialis; cum discrimen ullum assignari non possit. Sed ex hoc ipso quod discrimen assignari non potest, iudico etiam nullam esse diversitatem. Potuit ergo citius oriri mundus, sed tunc statuendus erit aeternus.

Materiam naturaliter exigere extensionem, est partes ejus naturaliter exigere inter se ordinem coexistendi. An hoc negabis?

Eo ipso dum puncta ita sita ponuntur ut nulla duo sint inter quae non detur medium, datur extensio continua.

In Tuo arbitrio est vinculum realizans composita, appellare modum substantialem. Sed tunc modum usurpas alio sensu, quam solemus. Vera enim substantiae compositae basis erit. Sed iste modus est res durabilis, non modificatio quae nascitur et perit. Non tamen est modus monadum, quia sive ponas eum sive tollas, nihil in monadibus mutatur.

Non dico inter materiam et formam dari, medium vinculum, sed ipsam compositi formam substantialem, et materiam primam sensu scholastico sumtam, id est potentiam primitivam activam et passivam, isti vinculo, tanquam Essentiae compositi inesse. Interim vinculum hoc substantiale naturaliter non essentialiter vinculum est. Exigit enim monades sed non essentialiter involvit, quia existere potest sine monadibus, et monades sine ipso.

Si realizans phaenomena praesupponeret aliquid praeter monades, jam compositum esset realizatum contra hypothesin. Quicquid existit praeter Monades et Monadum modificationes Realizantis phaenomena consecrarium est.

Etiam verae substantiae compositae non gignuntur nisi ad sensum,

(Cardano, Clavius,² and others rejected this kind of reasoning, which is found in places in Euclid), so if someone supposes that the world had been created earlier, he will discover that it was not made earlier, because time is not absolute but only the order of successions. In the same way, if someone supposes that the entire universe were moved in place, with the distances between all things preserved, nothing will be done, because absolute space is something imaginary, and there is nothing real in it except the distances of bodies. In a word, space and time are orders, not things. Such suppositions arise from false ideas. Thus, unless the world is eternal, it may be said equally to have begun at any time; and unless we accept this, we will fall into absurdity, and we will not be able to answer those who argue for the eternity of the world. For it would follow that God had done something contrary to reason, since it is not possible to give a reason for one initial time rather than another, because no distinction can be assigned. But from the very fact that no distinction can be assigned, I also judge that there is no difference. Therefore, if the world could have originated earlier, then we will have to conclude that it is eternal.³

For matter naturally to require extension is for its parts naturally to require an order of coexistence among themselves. Or will you deny this?

When points are situated in such a way that there are no two between which there is not an intermediate point, then, by that fact, there is continuous extension.

In your judgment, we should call the bond realizing a composite a substantial mode. But then you are employing "mode" in a sense other than that to which we are accustomed. For, in fact, it will be the foundation of a composite substance. But such a mode is an enduring thing, not a modification that arises and perishes. Yet it is not a mode of monads, since whether you posit it or take it away, nothing is changed in the monads.

I do not say that there is a mediating bond between form and matter but, rather, that the substantial form itself of the composite and primary matter taken in the Scholastic sense, that is, primitive active and passive power, belongs to that bond, as the essence of the composite. However, this substantial bond is naturally, and not essentially, a bond. For it requires monads but does not involve them essentially, since it can exist without monads and monads without it.

If the thing realizing the phenomena presupposed something besides monads, a composite would already be realized, contrary to the hypothesis. Whatever exists besides monads and the modifications of monads is a consequence of the the thing realizing the phenomena.

Even true composite substances are not produced, except in relation to

nam, ut saepe dixi, non tantum anima sed et animal manet. Non oriuntur vel occidunt nisi modificationes et (ex substantiatis) aggregata; id est accidentia vel entia per accidens.

A ratione rerum (etiam sine respectu ad sapientiam Divinam) iudicamus nos non solos existere, quia nulla apparet privilegii pro uno ratio. Nec ipse aliter ratione convincere poteris aliquem, qui contenderet se solum existere, alios a se tantum somnari. Sed ratio datur privilegii existentium prae non existentibus, seu cur non omnia possible existant. Caeterum etsi nullae existerent creaturae praeter percipientem, ordo perceptus ostenderet sapientiam Divinam. Itaque nullus hic circulus, quamquam etiam sapientia DEI a priori, non ex solo phaenomenorum ordine habeatur. Ex eo enim quod contingentia reperiuntur, reperitur Ens necessarium, id intelligens, ut in Theodicaea ostendi. Si corpora mera essent phaenomena, non ideo fallerentur sensus. Neque enim sensus pronuntiant aliquid de rebus Metaphysicis. Sensuum veracitas in eo consistit, ut phaenomena consentiant inter se, neque decipiamur eventibus, si rationes experimentis inaedificatas probe sequamur.

Substantia agit quantum potest, nisi impediatur, impeditur autem etiam substantia simplex, sed naturaliter non nisi intus a se ipsa. Et cum dicitur monas ab alia impedi, hoc intelligendum est de alterius repraesentatione in ipsa. Autor rerum eas sibi invicem accommodavit, altera pati dicitur, dum ejus consideratio alterius considerationi cedit.

Aggregatum resolvitur in partes, non substantia composita; quae partes componentes exigit tantum, vero non ex iis essentialiter constituitur, alioqui foret aggregatum. Agit mechanice, quia in se habet vires primitivas seu essentielles, et derivativas seu accidentales.

Est Echo monadum, ex sua constitutione, qua semel posita exigit monades, sed non ab iis pendet. Etiam anima est Echo externorum, et tamen ab externis est independens.

Quia nec monades, nec substantiae compositae partiales de substantiae compositae totalis essentia sunt; ideo salvis monadibus vel aliis ingredientibus substantia composita tolli potest, et vice versa.

the senses; for, as I have often said, it is not only the soul that endures but the animal as well. Nothing arises or perishes except modifications and aggregates (of substantiated things), that is, accidents or accidental beings.

We judge from the reason of things (even without considering divine wisdom) that we do not exist alone, for it is evident that there is no reason to privilege one thing. You will not be able to convince someone otherwise through reason who contends that he alone exists and that other things are just being dreamed by him. But there is a reason for the privilege of existing things over nonexistent things, or a reason why not all possible things exist. Moreover, even if no creatures were to exist besides a perceiving one, the order of what was perceived would display divine wisdom. And so, even though the wisdom of God is also known a priori, and not only from the order of the phenomena, there is no circle here. For from the fact that contingent things are discovered, a necessary being is discovered, and one that is intelligent, as I have shown in the *Theodicy*.⁴ If bodies were mere phenomena, they would not deceive the senses on account of that. For the senses do not make known anything about metaphysical matters. The veracity of the senses consists in the fact that the phenomena agree among themselves, and we shall not be deceived by events, if we follow reasons properly built on experiences.

Substance acts so far as it can, unless it is impeded; but even a simple substance is impeded, though it is naturally impeded only from within by itself. And when it is said that a monad is impeded by another, this must be understood of the representation of the other in it. The author of things has accommodated them to one another: the one is said to be acted on when consideration of it gives way to the consideration of the other.⁵

An aggregate is resolved into parts; a composite substance is not. The latter merely requires component parts; it is not essentially constituted from them; otherwise it would be an aggregate. It acts mechanically, because it has in it primitive or essential forces and derivative or accidental ones.

It is an echo of monads, according to its constitution, with the result that once posited it requires monads, but it does not depend on them. The soul likewise is an echo of external things, and nevertheless it is independent of external things.

Because neither monads nor partial composite substances belong to the essence of the composite substance as a whole, it follows that the composite substance can be destroyed, while the monads or other ingredients are preserved, and vice versa.

Si corpora mera essent phaenomena, existerent tamen ut phaenomena velut iris.

Ais corpora posse esse aliud quam phaenomena, etsi non sint substantiae. Ego puto nisi dentur substantiae corporeae, corpora in phaenomena abire. Et ipsa aggregata nihil aliud sunt quam phaenomena cum praeter monades ingredientes, caetera per solam perceptionem addantur eo ipso dum simul percipiuntur. Praeterea si solae monades essent substantiae, alterutrum necessarium esset aut corpora esse mera phaenomena, aut continuum oriri ex punctis, quod absurdum esse constat. Continuitas realis non nisi a vinculo substantiali oriri potest. Si nihil existeret substantiale praeter monades, seu si composita essent mera phaenomena, extensio ipsa nil foret nisi phaenomenon resultans ex apparentiis simultaneis coordinatis, et eo ipso omnes controversiae de compositione continui cessarent. Quod vero additur monadibus ut phaenomena realisentur, non est modificatio monadum, quia nihil in earum perceptionibus mutat. Ordines enim seu relationes quae duas monades jungunt, non sunt in alterutra monade, sed in utraque aequae simul, id est revera in neutra seu in sola mente hanc relationem cogitante; nisi addas vinculum reale, seu substantiale aliquid, quod sit subjectum communium seu conjungentium praedicatorum et modificationum. Neque enim puto a TE statui accidens quod simul insit duobus subjectis, et unum, ut sic dicam, pedem in uno, alterum in altero habeat.

Quantitas continua non addit impenetrabilitatem, (nam ea etiam loco tribuitur) sed materia. Et vos ipsi statuitis impenetrabilitatem exigi tantum a materia, non esse de ejus essentia.

Substantia composita non consistit formaliter in monadibus et earum subordinatione, ita enim merum foret aggregatum seu ens per accidens; sed consistit in vi activa et passiva primitiva, ex quibus oriuntur qualitates et actiones passionisque compositi, quae sensibus deprehenduntur, si plus quam phaenomena esse ponantur.

Dicis *modificari substantialiter* esse monades habere modum, qui eas faciat naturale principium operationum. Sed quid quaeso ille Modus, est ne qualitas, est ne actio? Mutatne Monadum perceptiones? Nihil tale dici debet; revera substantia est, non monadum modus; etsi naturaliter ei Monades respondeant. Monades non sunt principium operationum ad extra. Nescio quid te adigat, ut substantialitatem compositi facias monadum

If bodies were mere phenomena, they would nevertheless exist as phenomena, like the rainbow.

You say that bodies can be something other than phenomena, even if they are not substances. I think that unless there are corporeal substances, bodies collapse into phenomena. And aggregates themselves are nothing but phenomena, since besides the ingredient monads, everything else is added through perception alone, by virtue of the fact that they are perceived at the same time. Moreover, if monads alone were substances, one of two things would be necessary: either bodies would be mere phenomena or a continuum would arise from points, which we agree is absurd. Real continuity can arise only from a substantial bond. If nothing substantial existed besides monads, that is, if composites were mere phenomena, then extension itself would be nothing but a phenomenon resulting from coordinated simultaneous appearances, and by that fact all the controversies concerning the composition of the continuum would cease. What is added to monads in order that the phenomena may be realized is not a modification of monads, since it changes nothing in their perceptions. For the orderings or relations that join two monads are not in one monad or the other, but in both equally at the same time; that is, really in neither, or only in the mind thinking this relation,⁶ unless you add a real bond, or something substantial, which is the subject of the common predicates and modifications, that is, those joining them together. For I do not think you would support an accident that is simultaneously in two subjects and has, so to speak, one foot in one and the other in the other.

Continuous quantity does not add impenetrability (for the former is ascribed to place as well); rather, matter does. And you yourselves hold that impenetrability is only required by matter and does not belong to its essence.

Composite substance does not consist formally in monads and their subordination, for then it would be a mere aggregate, that is, an accidental being; rather, it consists in primitive active and passive force, from which arise the qualities and the actions and passions of the composite, which are perceived by the senses, if they are assumed to be more than phenomena.

You say that to be *modified substantially* is for monads to have a mode, which makes them a natural principle of operations. But what, I ask, is that mode? Is it a quality? Is it an action? Does it change the perceptions of the monads? Nothing of the sort should be said. What is truly a substance is not a mode of monads, even if monads may naturally correspond to it. Monads are not a principle of operations with respect to what is external. I do not know what compels you to make the substantiality of a composite a

modum, id est revera accidens. Non est opus ut statuamus substantias oriri interireque, imo si statuimus evertemus substantiae naturam, recidemusque in aggregata seu Entia per accidens. Quod vulgo substantias dicunt, revera non sunt nisi substantiata. Philosophi Peripatetici, dum generationem et corruptionem veram substantiarum crediderunt, in difficultates inexplicabiles inciderunt circa originem formarum, aliaque, quae omnia meo explicandi modo cessant.

Ita est, ut ais, ubi substantia illa absoluta realizans phaenomena ponitur, statim habetur substantia compositi, sed a DEO regulariter agente non ponitur, nisi dentur ingredientia; nempe monades, aut aliae substantiae compositae partialesque. Interim haec ingredientia formaliter non insunt; exiguntur, non necessario requiruntur. Itaque miraculo abesse possunt, id est ista ingredientia non sunt formaliter constitutiva. Sunt constitutiva in aggregatis, non in veris substantiis. Dices cum substantia composita adest, monades vero vel ingredientia non adsunt, nemo dicet adesse compositum. Respondeo nemo dicet, nisi edoctus sit, esse miraculum; sic nemo dicet Corpus Christi adesse in Eucharistia, nisi edoctus hoc miraculo fieri.

Ignosce quod saltatim scribo, et ideo fortasse non semper satisfacio; nam ad anteriora scripta recurrere non possum. Inde interdum quaedam species contradictionis fortasse orietur. Re tamen excussa erit magis in modo enuntiandi quam rebus. Nescio, an, ubi et quomodo dixerim modificationem rei non extensae facere rem extensam.

Omnis perfectio meo iudicio ad lineam sapientiae pertinet. Porro linea sapientiae eo tendit, ut perfectio maxima introducatur, quam res capit. Itaque si quae perfectiones sunt aliis compatibles, non omittentur. Et talis est perfectio harmoniae praestabilitae, quae etiam altioribus rationibus nititur. Caeterum ipsa cujusque Monadis ἀντάρκεια facit ut in se invicem non agant, cum unaquaeque sufficiat omnibus quae in ipsa contingunt; quicquid in ipsis addes inane est.

Quaeris tandem per quod mea substantia composita differat, ab Entelechia, dico ab ea non differre, nisi ut totum a parte, seu Entelechiam primam compositi, esse partem constitutivam substantiae compositae, nempe vim Activam primitivam. Sed differt a Monade, quia est realizans phaenomena; Monades vero existere possunt, etsi corpora non essent nisi

mode of monads, that is, truly an accident. There is no need for us to hold that substances arise and perish; indeed, if we accept this, we shall overturn the nature of substance and fall back on aggregates or accidental beings. What are commonly called “substances” are in fact nothing but substantiated things. So long as Peripatetic philosophers believed in the true generation and corruption of substances, they fell into inexplicable difficulties concerning the origin of forms and other things, all of which vanish with my way of explaining them.

Thus, as you say, when the complete substance realizing the phenomena is posited, the substance of the composite is had immediately; but it is not posited by God, acting in a regular manner, unless the ingredients exist, namely, monads or other partial composite substances. Yet these ingredients are not formally in the substance; they are required, but they are not demanded by necessity. And so they can be absent as the result of a miracle, which is to say that these ingredients are not formally constituents. They are constituents in aggregates, not in true substances. You say that when a composite substance is present⁷ but the monads or ingredients are not present, no one will say that the composite is present. I respond: no one will say this unless he has been instructed that it is a miracle; in the same way, no one will say that the body of Christ is present in the eucharist unless he has been instructed that this happens miraculously.

Forgive me that I write intermittently, and for that reason perhaps do not always satisfy, for I cannot return to earlier writings. As a result, some appearance of contradiction perhaps may arise from time to time. Yet, when the matter is examined, it will be more in the mode of expression than in the account. I do not know whether, where, or how I might have said that the modification of a nonextended thing produces an extended thing.

In my opinion, every perfection pertains to the way of wisdom. Moreover, the way of wisdom tends toward the introduction of the greatest perfection of which a thing is capable. Thus, if some perfections are compatible with others, they will not be omitted. And such is the perfection of preestablished harmony, which also is supported by deeper reasons. In addition, the very self-sufficiency of monads entails that they do not act on one another, since each is sufficient for everything that happens in it; whatever you may add to them is in vain.

You ask, finally, how my composite substance differs from an entelechy. I answer that it does not differ from it except as a whole differs from a part, or that the primary entelechy of the composite is a constitutive part of the composite substance, namely, the primitive active force. But it differs from a monad, since it is that which realizes the phenomena,

Phaenomena. Caeterum Entelechia compositae substantiae semper Monadem suam dominantem naturaliter comitatur. Et ita si Monas sumatur cum Entelechia continebit formam substantialem animalis.

Nil prohibet quin Echo possit esse fundamentum aliorum, praesertim si sit Echo originaria.

Si monades rigore loquendo substantiis compositis accidunt, etsi sint naturaliter iis connexae; velle ut hae tollantur, est scrupulositatem Graecorum quorundam renovare, qui etiam accidentia panis et vini sublata esse contendunt. Denique non sunt augenda miracula praeter necessitatem. Revera Monades pertinent ad quantitatem quam superesse Scholastici ipsi volunt. Non est parvum, id omne adesse unius substantiae, abesse alterius, quod phaenomena realizet. Breviter: ex his duabus positionibus, dari substantiam compositam phaenomenis realitatem tribuentem, et substantiam naturaliter nec oriri nec occidere, mea cuncta hic consequuntur quamquam revera ex sola prima positione, seu ex solo postulato quod phaenomena habeant realitatem extra percipiens, videatur tunc demonstrari posse philosophia peripatetica emendata. Nam quod substantia non oriatur nec occidat, vel ex eo confici potest quia alias incidemus in perplexitates. Ex his porro oritur discrimen formale inter substantiam compositam et monadem, rursusque inter substantiam compositam et aggregatum; atque etiam independentia substantiae compositae ab ingredientibus a quibus composita dicitur, etsi ex iis non sit aggregata. Atque hinc etiam substantiam ac ipsam compositam (verb. gr. hominis, animalis) eandem numero manere dicimus, non tantum apparenter sed et vere etsi ingredientia perpetuo mutantur, et sint in continuo fluxu. Et cum sic ingredientia ipsa ponamus a substantia per naturam separari paulatim et particulatim; quidni admittas per miraculum separationem fieri ut sic ut loquar totatim et simul sublata omni substantia composita seu phaenomena realizante quae est in re terrena, substituto realizante phaenomena in re coelesti. Itaque non puto me a doctrina scholarum circa substantias corporeas abire nisi in hoc uno quod verae substantiae sive simplicis sive compositae generationem et corruptionem tollo, quia nec necessarias, nec explicabiles esse reperio; atque ita philosophiam istam innumeris difficultatibus libero. Sed ita substantiam

whereas monads can exist even if bodies should be only phenomena. Nevertheless, the entelechy of a composite substance always naturally accompanies its dominant monad. And so, if the monad is taken together with the entelechy, it will contain the substantial form of the animal.

Nothing prevents an echo from being able to be the foundation of other things, especially if it is an originary echo.

If monads, strictly speaking, are accidental to composite substances, even if they are naturally connected to them, then to maintain that they are destroyed is to resurrect the excesses of certain Greeks who argue that even the accidents of the bread and the wine are destroyed.⁸ Certainly, miracles should not be multiplied beyond necessity. In fact, monads pertain to quantity that the Scholastics themselves want to remain. It is no small thing for all of one substance to be present and for all of the other, which realizes the phenomena, to be absent. In short: from these two propositions—that composite substance exists and imparts reality to the phenomena, and that substance neither arises nor perishes naturally—there follows all that I want to say here, although in fact it seems that an emended Peripatetic philosophy can be demonstrated from the first proposition alone, that is, from the single premise that the phenomena have reality outside of a perceiver. For the fact that substance neither arises nor perishes certainly can be derived from this, since otherwise we shall fall into perplexities. Moreover, from this there arises the formal distinction between a composite substance and a monad, and again between a composite substance and an aggregate, and also the independence of a composite substance from the ingredients from which it is said to be composed, although it is not aggregated from these. And for this reason also we say that the substance and the composite itself (for example, that of a man or an animal) remain numerically the same, not only in appearance but in fact, although the ingredients are forever changing and are in constant flux. And since in this way we assume that the ingredients themselves are separated gradually, one by one, from the substance by natural means, why do you not allow separation to occur totally (so to speak) and all at once through a miracle, with every composite substance, that is, the realizer of the phenomena in the terrestrial thing destroyed, and with the realizer of the phenomena in the celestial thing substituted for them? Accordingly, I do not believe I depart from the Scholastic doctrine of corporeal substances except in this one thing, that I do away with the generation and corruption of true substances, whether simple or composite, since I find it to be neither necessary nor explicable; and thus I free that philosophy from innumerable difficulties. But in this way I restrict composite or corporeal sub-

corpoream seu compositam restringo ad sola viventia, seu ad solas machinas naturae organicas. Caetera mihi sunt mera aggregata substantiarum quae appello substantiata; aggregatum vero non constituit nisi unum per accidens.

Ad ea quae de punctis Zenoniis dixisti addo, ea non esse nisi terminos, itaque nihil componere posse: sed et Monades solae continuum non component, cum per se careant omni nexu quaelibet monas est tanquam Mundus separatus. At in materia prima (nam secunda aggregatum est) seu in passivo substantiae compositae involvitur continuitatis fundamentum, unde verum oritur continuum ex substantiis compositis juxta se positis, nisi a Deo supernaturaliter tollatur extensio, ordine inter coexistentia illa quae se penetrare censentur sublato. Et hoc sensu fortasse dixi extensionem esse modificationem materiae primae seu formaliter non-extensi. Sed hoc genus Modalitatis medium est inter attributa essentialia et accidentia, consistit enim in attributo naturali perpetuo, quod non nisi supernaturaliter mutari potest.

Credebam ego et pro certo Tibi scripseram Lamindum Pritanium esse Bernardum Trevisanum Nobilem Venetum. Sed hoc nuper in dubium vocavit Diurnalista Batavus, qui Antonium Muratorium Comachensibus pro Mutinae Duce scriptis notum auctorem facit.

Quod hominem in conversione glaciei quae frangitur comparavi, accipiendum est pro natura cujusque subjecti. Resistentia quae in homine per gratiam separatur est vitalis, cum consistat in praejudiciis intellectus et passionibus voluntatis.

Rogo ut data occasione salutandi Domini de Cochenheim, et rerum Sinensium et Japonensium, atque etiam R. P. Fonsecae mihi conciliandi memor esse velis. Circa libros ob absentiam Aulae nunc mandata tardius habentur, praesertim cum Regem primariosque Ministros speremus.

Cogitavi aliquando quid ei ex vestris dicendum foret, qui omnem substantiam compositam seu omne realisans phaenomena tanquam superfluum tollere vellet. Hoc posito substantia corporis ipsi consisteret in phaenomenis constitutivis, ut accidentia consisterent in phaenomenis resultantibus, quemadmodum natura albi consistit in bullis instar spumae vel simili aliqua contextura, cujus perceptio est in nobis inobservata; acci-

stance to living things alone, that is, to organic machines of nature. The rest are for me mere aggregates of substances, which I call substantiated things; but an aggregate constitutes only an accidental unity.



To the things you have said concerning Zeno's points, I add that they are only boundaries, and so can compose nothing. But monads alone also do not compose a continuum, since in themselves they lack all connection; each monad is like a separate world. Rather, the foundation of continuity is contained in the primary matter (for secondary matter is an aggregate), or in the passive [power] of a composite substance, from which it follows that a true continuum arises from composite substances placed next to each other, unless God removes the extension supernaturally by removing the order among those coexistents that are thought to penetrate each other. And in this sense I have perhaps said that extension is a modification of primary matter, or of that which is formally nonextended. But this kind of modality is intermediate between essential attributes and accidents, for it consists in an enduring natural attribute, which can be changed only supernaturally.

I believed, and had written to you with certainty, that Lamindus Pritanius was Bernard of Trevisi, the Venetian noble. Recently, however, this was called into doubt by a Dutch writer, who identifies the author as Antonio Muratori, known for writings on Commachio composed on behalf of the duke of Modena.⁹

When I compared a human being in a state of conversion to ice that breaks, this should be understood in accordance with the nature of each subject. The resistance overcome in a human being through grace is a part of life, since it consists in prejudices of the intellect and passions of the will.¹⁰

I ask that you try to remember to convey my best wishes when the occasion arises to Mr. von Cochenheim, to keep me abreast of Chinese and Japanese affairs, and to obtain for me the works of the Reverend Father Fonseca.¹¹ Concerning books, because of the absence of the court, orders are now considered more slowly, especially since we are expecting the king and the first ministers.



I have sometimes thought about what would have to be said by one of your order who wanted to do away with all composite substance, or everything realizing the phenomena, as though superfluous. With this assumed, the substance of body itself would consist in constitutive phenomena, while accidents would consist in resulting phenomena, just as the nature of a white thing consists in bubbles, like foam or similarly textured things, whose perception is unobserved in us. But the accident of white would

dens vero albi consisteret in perceptione illa observata, per quam album agnoscimus. Itaque si Deus vellet pro albo substituere nigrum servatis accidentibus albi, efficeret ut *omnes percipientes* (in omnium percipientium consensu consistit phaenomeni veritas) retinerent perceptionem albi observatam et ejus effectus, seu perceptionem resultantis ex constitutivo; sed perceptionem inobservatam haberent non spumarum seu monticulorum , id est texturae album facientis, sed vallium , seu texturae facientis nigrum. Itaque omnes perceptiones observabiles panis manerent, sed pro phaenomenis constitutivis (quae etiam a nobis percipiuntur sed inobservabiliter) phaenomenorum constitutivorum seu inobservabilium carnis perceptio universalis substitueretur. Vale, ita precatur.

Deditissimus

Godefridus Guilielmus Leibnitius

P.S. Ignosce quae perturbatissimae scriptioni meae. Has literas multo citius mittere constitueram, sed varia intercessere. Quid de Dno van Driesch quem putem favore Tuo non indignum. Hortatus sum ut vestros quemadmodum par est, colat, fribuscula ex animo deleat. Id se facturum spondet.

consist in the observed perception by which we recognize a white thing. Accordingly, if God wanted to substitute a black thing for a white thing with the accidents of the white thing preserved, he would bring it about that *all perceivers* (for the truth of a phenomenon consists in the agreement of all perceivers) would retain the observed perception of the white thing and its effects, that is, the perception of that which results from the constitutive phenomena; but the unobserved perception would not be of foam or snowy mountains , that is, of the texture making a white thing, but of earthworks , or of the texture making a black thing. And so all observable perceptions of the bread would remain, but in place of the constitutive phenomena (which also are perceived by us, though unobservably) there would be substituted a universal perception of the constitutive or unobservable phenomena of the flesh. May you be well.

Most faithfully,

Gottfried Wilhelm Leibniz

P.S. Please ignore how confused my writing is. I had intended to send this letter much earlier, but a variety of things got in the way. What news have you of Mr. van Driesch, whom I judge not undeserving of your support? I encouraged him to pay his respects to your order, as is proper, and to drop his aloofness.¹² He promises that he will do so.

Appendix: Catalogue of the Leibniz–Des Bosses Correspondence

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DB*	1/25/06	LBr 95, 1–2	G.ii.291–293
L*	2/2/06	BN, 93–95 LBr 95, 5–6	D VI.1, 173–175 G.ii.294–296
DB*	2/12/06	LBr 95, 9–10	G.ii.296–299
L*	2/14/06	BN, 126–127 LBr 95, 11	D II.1, 265–266 G.ii.300–301
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L*	3/11/06	BN, 134–137 LBr 95, 14–15, 18–19 LBr 95, 16–17	D II.1, 266–270 G.ii.304–306
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L*	7/11/06	BN, 97 LBr 95, 22	D II.1, 270–271 G.ii.310–311
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L*	9/1/06	BN, 85–86 LBr 95, 24–25 LBr 95, 26 ⁵	D II.1, 271–272 G.ii.313–314 G.ii.314–315n.
DB*	9/17/06	LBr 95, 27–28	G.ii.315–316
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L*	10/4/06	BN, 101–102 LBr 95, 31	D II.1, 274–275 G.ii.319–320
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DB	5/25/08	LBr 95, 59	not published
L	6/14/08	MS missing	D VI.1, 181 G.ii.350
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L*	8/4/10	BN, 59–60 LBr 95, 127–128	D II.1, 289–290 G.ii.409–410
DB*	10/11/10	LBr 95, 130–131	G.ii.410–411
DB	11/4/10	Leipzig UB, Kester II A IV 1031	not published
L*	11/7/10	MS missing LBr 95, 131	D II.1, 290–291 G.ii.411–413
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L	1/6/12	BN, 10	D VI.1, 195–196 G.ii.427–429
DB*	1/28/12	LBr 95, 140–141	G.ii.429–433
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DB	2/18/12	LBr 95, 152–153	G.ii.440
L	3/17/12	BN, 34	D VI.1, 196 G.ii.440–441
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DB*	5/20/12	LBr 95, 158, 163	G.ii.441–444
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L*	3/15/15	Harvard University, Houghton Library MS Lat. 370	D II.1, 308–309 G.ii.492–493
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DB*	7/20/15	LBr 95, 218–219	G.ii.500–502
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L*	1/13/16	BN, 144–147	D II.1, 315–318 G.ii.508–511
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L*	5/29/16	British Library Add. MS 5104, 12–15	D II.1, 318–323 G.ii.515–521

¹ An asterisk (*) indicates that the letter is included in this volume.

² Given as month/day/year. The years given as 06 to 16 designate 1706 to 1716.

³ For each letter, the first citation refers to the document received by Leibniz or Des Bosses. Subsequent citations refer to drafts or copies of the letter and to ancillary documents. “LBr *m*, *n*” refers to sheet (or *Blatt*) *n* in file *m* of the Leibniz-Briefwechsel. “BN, *n*” refers to folio *n* in Bibliothèque Nationale, Fonds Latin 10355.

⁴ Page numbers of the printed text in G and D.

⁵ Supplementary study.

⁶ Following Dutens, Gerhardts mistakenly dates this letter 1 February 1707.

⁷ As noted by Gerhardts, Dutens mistakenly dates this letter 24 February 1707. Both the sent version and the draft carry the date 24 December 1707.

⁸ Following Dutens, Gerhardts mistakenly dates this letter 2 October 1708. The manuscript indicates only the month of October.

⁹ Gerhardts gives the date of this letter as 24 April 1709, which is the date appearing on the draft. Dutens gives 30 April 1709, the date appearing on the Halle manuscript.

¹⁰ Gerhardts mistakenly dates this letter 17 May 1709.

¹¹ Essay on Chinese rites and religion.

¹² Unsent draft, printed by Gerhardts as a separate letter.

¹³ Gerhardts mistakenly dates this letter 5 February 1712, which is the date of the draft.

¹⁴ Supplementary study.

¹⁵ Des Bosses mistakenly dates this letter 10 October 1710, the date printed by Gerhardts.

¹⁶ Supplementary study.

¹⁷ Following Dutens, Gerhardts mistakenly dates this letter 24 April 1713.

Notes

Introduction

1. In English this term has been translated as both “substantial bond” and “substantial chain.” We prefer the former, since it preserves the anachronistic but helpful analogy with chemical bonding.

2. For further details and relevant references, see Look 1999, 16–17.

3. This remains Des Bosses’s objective throughout the correspondence. See, e.g., Letter 51, in which he attempts to explain the unity of the monads of a living body “in the language of the Peripatetics, by means of which I shall try to adapt your system wherever possible for the use of the schools.”

4. In 1668 Leibniz initiated the project of the *Catholic Demonstrations* under the auspices of Johann Christian von Boineburg, first minister to the elector of Mainz. As Mercer argues, one of the motivations for the project was to promote reconciliation between Roman Catholics and Lutherans, by resolving “certain theological problems in a way that would satisfy members of both faiths and that would remain consistent with the doctrinal pronouncements of the Council of Trent” (2001, 63). Among these problems was that of transubstantiation, which Leibniz analyzed in an essay ca. 1668 (A VI.i: 508–12/L 115–20), with very different results from those reached in the correspondence with Des Bosses. Leibniz’s continued commitment to the *Catholic Demonstrations* can be traced in writings up through the final breakdown in his discussions with Bossuet over church reunion during the early 1690s (see, e.g., A II.i: 487–91/L 259–62; A VI.iv N408–20; and, on the breakdown, Murray 2002). Even thereafter, however, his view of the authority of the Catholic church remained undiminished. The following statement, from a 1679 letter to Duke Johann Friedrich, can be taken to represent his position throughout his career: “nothing is more useful for the general good than the authority of a universal church which forms a body of all Christians, united by bonds of charity, and which can hold in sacred respect the greatest powers on earth as long as they are still sensible to the reproaches of their consciences. Every good person should therefore desire that the luster of the church everywhere be restored and that the spiritual power of its true ministers over the faithful may be more fully recognized than is often done, even among those who pass as the most Catholic” (A VI.i: 489/L 261, quoted in Mercer 2001, 67). Later, Leibniz will make explicit a question that is perhaps already implicit in this passage: whether the true Catholic, or universal, church must be identified with the present Roman Catholic church. See below, note 28.

5. Sommervogel (1890, vol. 1, 1857–58) quotes from a letter to a fellow Jesuit in which Des Bosses speaks of his plan for a “*Clavis Lycaeii*, on which I have worked during my leisure hours for many years; this will be a treatise on metaphysics that I hope to publish soon, if God preserves my life and a modicum of health. My principal aim is to prove two things: first, that matter is a *thing* distinguished from extension; second, that there is a distinction that is more than *modal*, and consequently *real*, between matter and primitive corporeal forms.”

6. See the papers collected in Lodge 2004.

7. For an assessment of these efforts, see Rutherford 1996.

8. As we have observed, the latter was a long-standing concern for Leibniz. It is evidenced in his readiness to accommodate the objections of Tournemine on the issue of soul-body union (see Introduction, §7), and in his desire that the *Theodicy* receive a favorable reception in the *Mémoires de Trévoux*, which Tournemine edited (see Letters 50, 60, 62). On a number of occasions in the correspondence, Leibniz expresses interest in locating agreement with Catholic theologians, although he also insists that he does not want to hide his own allegiance. See Letters 16, 20, 21, 52.

9. Letter 17. See also Letter 19: “Philosophical essays, no less than mathematical ones, are beyond the grasp of the public, but they are more open to hostile interpretations. That is why I would prefer that one day they be presented united rather than piecemeal and exposed to attacks, as long as they are unable to defend each other.”

10. “Preliminary Discourse on the Conformity of Reason with Faith,” §86 (G.vi.100/Huggard 122).

11. See Antognazza 2002; Murray 2002.

12. “Our greatest failure has been the sectarian spirit which imposes limits on itself by rejecting others” (G.iv.523–24/L 496). For further citations, see Rutherford 1996, 197–99.

13. “The truth is more widespread than one thinks, but it is very often painted over, and very often also disguised, weakened, disfigured, corrupted by additions that damage it and render it less useful. By exposing these traces of the truth in the ancients, or (to speak more generally) in our predecessors, gold is extracted from mud, the diamond from its mine, and light from darkness; and this would amount to a certain perennial philosophy.” Letter to Nicholas Remond, 26 August 1714 (G.iii.624–25).

14. For more on this point, see the editors’ introduction to Rutherford and Cover 2005.

15. In the draft of the letter, Leibniz writes (with the bracketed words deleted): “I do not think we should depart from customary ways of speaking [provided that words are taken in the correct sense].” His position here comes close to that of Berkeley, who argues that in philosophical matters “we ought to ‘think with the learned, and speak with the vulgar.’ They who to demonstration are convinced of the truth of the Copernican system do nevertheless say ‘the sun rises,’ ‘the sun sets,’ or ‘comes to the meridian’; and if they affected a contrary style in common talk it would without doubt appear very ridiculous” (*A Treatise concerning the Principles of Human Knowledge* [1710], §51).

16. Compare Letter 38: “When the matter is explained properly, we can be accommodating in how it is expressed.” He gives the following example in Letter 23: “Writers speaking popularly often confound ‘infallibly determined’ with ‘necessarily’ in the strict sense, with the result that sometimes they speak more harshly

than they think.” In the draft, the last clause reads: “with the result that the errors of many in this respect indeed consist more in words than in things.”

17. Leibniz comes closest to providing an answer to the second question in *Theodicy*, §168. The criterion he invokes is acceptance of his “fundamental assumption that God has chosen the best of all possible worlds”: “There are philosophers who have maintained that there is nothing possible except that which actually happens. These are the same people who thought or could have thought that all is absolutely necessary. Some were of this opinion because they admitted a brute or blind necessity in the cause of the existence of things: and it is these I have most reason for opposing. But there are others who are mistaken only because they misuse terms. They confuse moral necessity with metaphysical necessity: they imagine that since God cannot help acting for the best he is deprived of freedom, and things are endowed with that necessity which philosophers and theologian endeavor to avoid. With these writers my dispute is only one of words, provided they admit, in fact, that God chooses and does the best” (G.vi.210–11/Huggard 228–29).

18. See Couturat 1901, 513–15. On the range of the Jesuits’ scientific activities, see the papers collected in Feingold 2003a and 2003b.

19. For accounts of Leibniz’s knowledge of, and writings on, China, see Mungello 1977; Widmaier 1990; Cook and Rosemont 1994; Perkins 2004.

20. See Robinet 1988, 121 ff.

21. Cook and Rosemont 1994, 46–47.

22. For a full discussion, see Perkins 2004, chap. 4.

23. G.ii.382. Translated in Cook and Rosemont 1994, 71. Leibniz recognizes the uncertainty involved in the interpretation of ancient Chinese texts. However, in the absence of proof to the contrary, we are obliged to understand the views they express charitably: “even if it [Chinese doctrine] is regarded equivocally, it is advisable to give it the most favorable meaning. . . . If we ever impute to Confucius doctrines that are not his, certainly no pious deception would be more innocent, since danger to those mistaken and offense to those who teach is absent” (Cook and Rosemont 1994, 63). In short, the least harm is done if Confucius’s views are interpreted in a way that renders them consistent with Christianity.

24. See “Principles of Nature and Grace,” §18 (G.vi.606/AG 212–13); “Monadology,” §90 (G.vi.622–23/AG 224–25); and Rutherford 2003.

25. In *Theodicy*, §95, Leibniz supports this conclusion with further appeals to Catholic authority: “Father Francis Xavier answered the Japanese that if their ancestors had used well their natural light God would have given them the grace necessary for salvation; and the Bishop of Geneva, Francis de Sales, gives full approval to this answer” (G.vi.156/Huggard 176).

26. Spee was appointed professor at Paderborn in 1624; from 1626 he taught at Speyer, Wesel, Trier, and Cologne. He is best known for his *Cautio criminalis* (1631), which argued for reforms in the prosecution of witchcraft. Spee’s *Guldenes Tugendbuch* (published posthumously in 1649) had a profound influence on the development of Leibniz’s theological and ethical views. He was introduced to Spee’s

work in the late 1660s during his employment as secretary to Johann Christian von Boineburg, first minister to the elector-bishop of Mainz, Johann Philipp von Schönborn—himself a follower of Spee. See *Theodicy*, §97; G.vii.550; and the texts gathered at A VI.iv: 2514–29, especially “Dialogue sur la nature des trois vertues divines: Foy, Espérance et Charité,” which Leibniz translated from the preface to Spee’s book.

27. Des Bosses insists that this was also Spee’s view. Later he sent Leibniz a copy of a 1624 letter from Spee confirming this point (Grua 223). On receiving it, Leibniz replied in Letter 44: “Thank you for Father Spee’s German letter, which is clearly extraordinary, but at the same time is filled more with emotion (even if praiseworthy) than with reason.”

28. “Schism is contrary to charity, heresy contrary to faith. Therefore, all those are schismatics who do not recognize as their brothers those who do not disagree fundamentally [*non fundamentaliter dissentientes*]. Charity is the defining mark of the Catholic church. He is a Catholic whose love is universal [*catholicus*]. He is a schismatic who allows salvation to no one outside his belief [*opinionem*]. The definition of charity, as our learned teach, is a good will. . . . I define charity as benevolence, albeit universal benevolence” (D VI.1, 313). See also his letter to Madame de Brinon of 16 July 1691: “The essence of Catholicism is not to be in external communion with Rome; otherwise those who are unjustly excommunicated would cease to be Catholics despite themselves and without it having been their fault. The true and essential communion, which makes it that we are of the body of Jesus Christ, is charity. All those who encourage schism through their own fault by setting up obstacles to reconciliation, contrary to charity, are truly schismatics; whereas those who are ready to do all they can to foster once again external communion are in fact Catholics” (K.vii.119–20).

29. For further background, see Abercrombie 1936; and the article “Jan-sénisme,” in *Dictionnaire de théologie catholique*, vol. 8, part 1, 318–530.

30. Kremer 1994 offers a detailed discussion of this doctrine.

31. See Abercrombie 1936, 321. Translated in Sleight 1990, 27.

32. Denzinger 1991, 614–15.

33. Among Quesnel’s later works are two published defenses of Arnauld: *Histoire abrégée de la vie et des ouvrages de Monsr. Arnauld, ci-devant imprimée sous le titre de Question curieuse &c. Augmentée dans cette nouvelle édition* (Cologne, 1695) and *Defensio Arnaldina, sive, Analytica: synopsis libro de correptione et gratia (quae ab Arnaldo, doctore Sorbonico, edita est an. 1644) ab omnibus reprehensorum vindicata calumniis* (Antwerp, 1700). For further background, see “Quesnel et le Quesnellisme,” in *Dictionnaire de théologie catholique*, vol. 12, 1460 ff.

34. Augustine, *Confessions* X.29: “Give what you command and command what you will [*Da quod jubes et jube quod vis*].”

35. Denzinger 1995, 670–82.

36. See Letters 17 and 19. In Letter 18 Des Bosses disputes Leibniz’s interpretation of the Church’s infallibility.

37. Leibniz acknowledges the difficulty in pinning down Jansen's views, and in Letters 19 and 50 expresses his wish for a trustworthy summary of the contents of *Augustinus*. For such a summary, see Abercrombie 1936, 126–53. The controversy surrounding the propositions is discussed at length in “Jansénisme,” in *Dictionnaire de théologie catholique*, vol. 8, part 1, 474–95.

38. Leibniz explicitly criticizes central Jansenist claims in Letters 19 and 21. See also *Theodicy*, §§93–94, 283.

39. See Molina 1953, 14 (= *Concordia*, pars I, disp. 2, art. 3).

40. Leibniz had already presented his position to Des Bosses in these terms in Letter 21: “I believe that freedom must be saved not only from compulsion but also from necessity, yet not from infallibility or determination, for there must always be a reason why one thing rather than another happens, and there is never an indifference of perfect equilibrium. But a determining reason determines by inclining, not by necessitating, since things' happening differently does not imply a contradiction.”

41. See Murray 1996, following Knebel 1991. Grua (1953, 222–37) documents a range of other sources familiar to Leibniz and earlier uses of the expression in his writings. See also Adams 1994, 21–22; 2005.

42. See *Theodicy*, §§22–33, 231, 369.

43. *Theodicy*, §132 (G.vi.184/Huggard 203). See also *Theodicy*, §§168, 174, 175, 231, 234, 237, 310, 344, 351, 367.

44. Compare Adams: “when Leibniz says that God's choice of the best is morally necessary, we must take him to mean that it is necessary that if God did not choose the best, God would not be perfectly good” (1994, 22). Although it is plausible to see God's supreme goodness as the attribute that explains his choice of the best, Leibniz himself highlights the perfection of divine wisdom. On his account, every will naturally inclines toward the good. God and “the wise” are distinguished by the fact that they infallibly know the good *as* good.

45. See also Leibniz's fifth letter to Clarke, §4: “We must also distinguish between a necessity which takes place because the opposite implies a contradiction (which necessity is called logical, metaphysical, or mathematical) and a necessity which is moral, whereby a wise being chooses the best, and every mind follows the strongest inclination” (G.vii.389/L 696). Cf. *ibid.*, §§7–8.

46. As Murray 2004 shows, the Jesuits did not speak with a single voice on this issue. Among their ranks were those who defended a position resembling that of Leibniz.

47. On Vasquez, see Letter 22, note 8.

48. “Whatever perception one may have of the good, the effort to act in accordance with the judgment, which in my opinion *forms the essence of the will*, is distinct from it. Thus, since there is need of time to raise this effort to its climax, it may be suspended, and even changed, by a new perception or inclination which passes athwart it, which diverts the mind from it, and which even causes it sometimes to make a contrary judgment” (G.vi.301/Huggard 314).

49. *New Essays* II.xxi.47 (NE 195–96). See also Leibniz's fifth letter to Clarke, §11.

50. See Sleigh 2005.

51. See Busche 1997; Mercer 2001.

52. For a fuller account, see Rutherford 1995, chap. 6.

53. “Discourse on Metaphysics,” §9 (A VI.iv: 1541–42/AG 42).

54. Leibniz restates his reasoning in a subsequent letter: “I had asserted that one must admit in bodies the existence of something which is truly a single entity, since matter or extended mass in itself can only be many entities, as St. Augustine very well pointed out after Plato. Now, I deduce that many entities do not exist where there is not a single one that is genuinely an entity and that every multiplicity presupposes unity. . . . I am very far removed from the opinion which states that animate bodies are only a small part of the others. For I believe rather that everything is full of animate bodies. . . . I maintain that the number of souls or at least of forms is quite infinite, and that since matter is endlessly divisible, one cannot fix on a part so small that there are no animate bodies within, or at least bodies endowed with a basic entelechy or (if you permit one to use the word ‘life’ so generally) with a vital principle, that is to say, corporeal substances about which it may be said in general of them all that they are living” (G.ii.118/LA 151–52).

55. Sleigh 1990, 119. See also the discussions of Robinet 1986 and Wilson 1989. For Leibniz’s defense of corporeal substance in the Arnauld correspondence, see the passage quoted in note 54.

56. Leibniz makes an intriguing suggestion in the preceding passage about the unity of a corporeal substance. In line with what he says elsewhere, he ascribes this unity to the action of the substantial form; but here this action seems to be restricted to the form’s *representation* of the body as one in relation to external things. If Leibniz were to hold that the unity of a corporeal substance is a function solely of the body’s being represented as one, then he would seem to be committed to the thesis that the unity of a corporeal substance is nothing over and above the unity of the soul. However, this is not a conclusion that he actually draws. Whatever he means to say in this passage about the unity of a corporeal substance, he conceives of it as an animated body, to which belong material properties such as impenetrability.

57. This notation is a later addition to Leibniz’s copy of the letter. It does not appear in the version received by Arnauld. However, a related passage is included in the draft of the letter: “If one takes as the matter of body the assembly of substances from which the mass is composed, it is not essential to the substance, and we can lose successively all the parts of our body. However, in the present state of the body these present parts are essential to it, make up its *immediate requisites*, and consequently they constitute a whole, which moreover has a genuine unity. For in examining on other occasions in a sufficiently rigorous way what whole and part are, I have found this to be the case. One can still give another definition of matter which conforms well enough to the meaning of the Scholastics but not well enough to ordinary usage. According to this explanation, although matter is the principle of divisibility, it is no more divisible than form. But this would be a dispute over words”

(Finster 1997, 300). For further discussion of Leibniz's position, see Adams 1994, 345–49.

58. Compare the draft of his letter to Arnauld of 28 November/8 December 1686. After responding to Arnauld's criticism of the "hypothesis of concomitance," Leibniz writes: "The other difficulty is incomparably greater, concerning substantial forms and the souls of beasts; and I confess that I am not satisfied about it. In the first place, one would have to be sure that bodies are substances and not merely true phenomena like the rainbow. . . . apart from man there is no body about which I can declare that it is a substance rather than an aggregate of many or perhaps a phenomenon. However, it seems to me certain that if there are bodily substances, they do not belong to man alone, and it appears probable that animals have souls although they lack consciousness" (G.ii.72–73/LA 88–90). The corresponding passage in the sent version of the letter reads: "I should like to be able to express my ideas as clearly and decisively on the other question, regarding substantial forms. The first difficulty that you point out, Sir, is that our body and soul are two substances which are really distinct; from which it seems the one is not the substantial form of the other. I reply that in my opinion our body in itself, leaving the soul aside, i.e., the corpse, cannot be correctly called a substance, like a machine or a heap of stones, which are only entities through aggregation; for regular or irregular arrangement has no effect on substantial unity. Besides, the last [Fifth] Lateran Council [1512–17] asserts that the soul is truly the substantial form of our body" (G.ii.75/LA 92–93).

59. See "Discourse on Metaphysics," §33 (A VI.iv: 1581–82/AG 65); Leibniz to Arnauld, 30 April 1687 (G.ii.94–95/LA 118); and "A New System": "It is this mutual relation, regulated in advance in each substance of the universe, which produces what we call their *communication*, and which alone brings about the *union of soul and body*. We can thus understand how the soul has its seat in the body by an immediate presence which could not be greater, since the soul is in the body as unity is in the resultant of unities, which is a multitude" (G.iv.484–85/AG 144).

60. *Mémoires*, May 1703, 869–70.

61. *Ibid.*, 870.

62. Leibniz expresses himself in similar terms in a March 1706 letter to the Electress Sophie: "As for the relation between the different unities, and in particular between mind and matter, I have conceived the system of preestablished harmony. . . . But if in addition to the relation of the mind and body, by which what happens in the one corresponds by itself to what occurs in the other, one still asks in what their union consists, I am not in a state to answer. For this union is not a phenomenon that makes itself known by sensible effects beyond this relation; and we cannot here below go beyond the phenomena" (K.iii.174–75).

63. However concessive, Leibniz's answer does not satisfy Tournemine. To it he retorts: "This union is not, as he says, a metaphysical idea. The body is really and physically united to the soul, more than two clocks perfectly alike are united" (G.vi.597).

64. He repeats the claim almost verbatim in the preface to the *Theodicy*: “It will perhaps be good to point out again . . . that, in denying the *physical influence* of the soul on the body or of the body on the soul, that is, an influence that makes the one disturb the laws of the other, I am not at all denying the union of the one with the other that makes of them a complete substance [*suppôt*]; but this union is something *metaphysical* that changes nothing in the phenomena. This is what I have already said in response to what the Reverend Father Tournemine, whose mind and knowledge are extraordinary, had objected” (G.vi.45/Huggard 69). See also *Theodicy*, “Preliminary Discourse,” §55 (G.vi.8); and part I, §59 (G.vi.135). For Leibniz, the term *suppositum* (French: *suppôt*) signifies a complete and self-subsistent individual. He applies the term generally to whatever is an ultimate subject of predication (as in “Discourse on Metaphysics,” §8: “actiones sunt suppositorum”), and more specifically to the nature of a human being, in which soul and body are united in a substance possessing a *per se* unity. For the latter use of the term, see Letter 20 and the supplementary study to Letter 48. For further discussion, see Adams 1994, 269–74, 295–99.

65. See, e.g., “Monadology,” §70 (G.vi.619/AG 222).

66. Here and hereafter an asterisk indicates that the cited translation has been modified.

67. See also G.ii.252/AG 177; G.ii.275–76/AG 181–82.

68. See Introduction, §11.

69. In the original Latin: “(5) Animal seu substantiam corpoream, quam Unam facit Monas dominans in Machinam.” Many commentators have read Leibniz as claiming that the dominant monad makes the monads of its body *into* a corporeal substance that is an *unum per se*. The two standard English translations support this inference: “(5) the animal, that is, the corporeal substance, which the dominating monad makes into one machine” (AG 177, which differs only slightly from L).

70. For more on this issue, see Look 2002.

71. Adams 1994, 269.

72. See Baxter 1995 for an extended defense of this reading, which he labels the “monadological view.”

73. The Gerhardt text is corrupt at this point. In place of “seu entelechia primaria animatum,” it should read: “si quidem corpus organicum ea massa constituat, sua entelechia primaria animatum.” We owe this correction to Paul Lodge, whose edition of the Leibniz–De Volder correspondence is forthcoming in the Yale Leibniz series.

74. Leibniz presents this thesis differently to different correspondents. To Arnauld, he claims that the substantial parts of a “genuine unity” are only immediate requisites *pro tempore* (G.ii.119–20). Here he appears to indicate a relation between a corporeal substance and other corporeal substances that are (for a time) material constituents of its body. To De Volder he asserts that subordinate monads do not make up a part of an organic body but are immediately required for it (G.ii.252). This seems to amount to much the same claim, allowing the substitution of monads for corporeal substances as the ultimate constituents of secondary mat-

ter. Leibniz makes a somewhat different claim to Des Bosses in Letter 16: “Thus the primary matter of any substance involves the primary matter of another substance existing in its organic body, not as an essential part, but as an immediate requisite, and for a time only [*pro tempore tantum*], since one takes the place of another.” Here the posited relation involves the primary matter of a soul or dominant monad and the primary matter of the subordinate monads of its body. If one assumes that primary matter is the basis of a monad’s representation of itself as having a body, then the thrust of the claim is that the soul’s representation of itself as embodied “immediately requires” other monads’ representations of themselves as embodied (namely, those monads that represent themselves as the material constituents of the soul’s body). Leibniz expresses a similar thought to De Volder when he says that the primitive passive power of a monad “is related to the whole mass of the organic body” (G.ii.252).

75. The natural connection is that guaranteed by the hypothesis of preestablished harmony, whereby volitional states of the soul are correlated with appropriate bodily motions, and passive changes in the body are correlated with appropriate sensory perceptions in the soul. If the soul did not stand in this sort of relation to a body of its own, it would have no intelligible connection to the physical universe or to the souls of other living creatures. In Leibniz’s words, “to remove [spirits] from bodies and place is to remove them from the universal connection and order of the world, which relations with respect to time and place produce” (Letter 16). How, though, are we to understand this assertion, given the reduction of matter to monads? In that case, the secondary matter of a soul’s body is constituted by innumerable subordinate monads, united by relations of perceptual harmony. Leibniz holds that every monad represents itself as an embodied creature that stands in spatiotemporal and causal relations to other bodies (G.ii.277–78/AG 183–84). But this is a function of its primary matter and is consistent with the absence of other monads (secondary matter) that ground the phenomenal appearance of its body. In principle, one could conceive of a world in which (1) there exist infinite monads, each of which represents itself as an embodied creature interacting with other bodies; (2) the perceptions of these different monads agree sufficiently with one another that it is accurate to describe them as perceiving the same physical universe; and (3) their representations of their organic bodies fail to be “well-founded,” in the sense that there exist no monads identifiable as the secondary matter of those bodies. There are various reasons for thinking that such a world would fail the test of maximizing perfection. But it does not follow that the monads belonging to it would be entirely removed from the “universal connection and order of the world.” For further discussion, see Rutherford 1995, 188–204, 226–30.

76. Compare Leibniz’s statement in Letter 29: “The soul can indeed operate internally without the aid of bodies, but not externally. Nevertheless, external things in bodies always correspond to its internal actions. Of course, through a miracle God can establish a soul without a body, but this does not agree with the order of things.”

77. Russell 1937, 152.

78. Christiane Frémont, in her French edition of the correspondence, emphasizes the issue of transubstantiation and concludes that “Christology is essential to Leibniz’s philosophy” (1981, 67). This claim is not repeated in the second edition of *L’être et la relation*, but she reiterates the idea as a central theme of her interpretation: “About what, then, do Leibniz and Des Bosses talk? About Christ” (1999, 25).

79. *Theodicy*, “Preliminary Discourse,” §19.

80. *Summa theologiae* III, q. 75, art. 4 ad 3.

81. *Summa theologiae* III, q. 76.

82. Compare Letter 34: “Multipresence does not require the expansion or replication of dimensions. Rather, it should be explained through a kind of presence having no relation to dimensions, just as if God should bring it about that something operates immediately at a distance.”

83. In the last passage, Des Bosses is responding to Leibniz’s attempt in Letter 29 to distinguish the domains of the real and the ideal: “Mass and its diffusion result from monads, but not space. . . . For space is something continuous, but ideal, whereas mass is discrete, indeed an actual multitude, or a being by aggregation, but one from infinite unities. In actual things, simples are prior to aggregates; in ideal things, the whole is prior to the part. Neglect of this consideration has produced the labyrinth of the continuum.” Des Bosses’s point is that even if we honor this distinction, Leibniz owes us an explanation of how the “diffusion” of mass results from monads.

84. In an earlier version of the letter that remained unsent, Leibniz expresses himself more fully: “it is not necessary, on your view, that those monads be destroyed or changed by God, but only that that through which they produce a new being be removed, namely, the union. In this way, the substantiality depending on it will cease, although there will remain the phenomenon, which now will arise not from those monads, but from some divinely substituted equivalent to the union of those monads. Thus no substantial subject will in fact participate. Yet those of us who reject transubstantiation have no need of such things.”

85. For further discussion of the difficulties the notion raises, see Look 1999 and 2004.

86. Letter 49. Later in the same letter Des Bosses writes: “the common sense of men seems to understand something more in a sensible body than phenomena that consist in the operation of a perceiving soul. And, speaking naturally, there ought to be some object distinct from the perception itself that corresponds to the perception; otherwise there would be no harmony.” See also Letter 51.

87. Compare Letter 51: “monads, considered with respect to their essence by abstracting from all existence or physical actuality, are indeed substances and metaphysically complete primary beings, since they have metaphysical actuality, that is, an entelechy; but they are not complete in the manner of a physical substance, except insofar as and when a dominant entelechy bestows existence and therefore unity on the whole organic mass, for example on the body of the horse, so that this mass itself is subordinate to no other entelechy.” In the preceding para-

graph, Des Bosses explains how the body of an animal is made one thing “by virtue of the existence emanating from the soul”: “this existence is a certain substantial mode emanating from the soul, or the total and dominant form, and affecting the remaining partial monads and subordinating them to itself; and in virtue of this it happens that from these subordinating monads and this dominant monad there exists one corporeal substance, which is called a horse.”

88. In Letter 63 Des Bosses challenges Leibniz’s position again, describing “the hypothesis reducing bodies to mere phenomena” as an “ingenious paradox,” and identifying it with the view defended by Berkeley. In Letter 64 Leibniz cryptically replies: “We correctly maintain that bodies are things, for even phenomena are real.” He goes on to dismiss Berkeley as someone who attacks the reality of bodies and as “the sort of person who wants to be known for his paradoxes.”

89. See also Letter 59: if “bodies are mere phenomena, then the substance of body should be sought in the phenomena alone. But not in our phenomena, in which the prior appearances remain, but in those that appear to the divine mind and to those to whom God reveals them.” On God’s “knowledge of vision,” see *Theodicy*, §40; and *Causa Dei*, §16 (G.vi.441).

90. For explanations of the term “ideal causation,” see Letters 54 and 57 and *Theodicy*, §66.

91. Leibniz makes this point most explicitly in the notes that form the basis of Letter 57: “the souls can be destroyed while the composite or corporeal substance remains, or the souls can remain while the composite or corporeal substance is destroyed. . . . precisely and formally the one is independent of the other; that is, the bond or composite substance is independent of the monads and their modifications.”

92. See Letter 57.

93. See Letters 54 and 70.

94. Admittedly this conclusion remains speculative. In the ontological table that accompanies Letter 69, Leibniz writes that the modification of a composite substance “arises from their mutual influence and consists in *derivative active and passive powers*, when bodies collide according to the laws of motion.” See also Letter 71: “[Composite substance] acts mechanically, because it has in it primitive or essential forces and derivative or accidental ones.”

95. See Letter 66: “If that real bond is possible, it should be possible for there to be an influence [*influxus*] of the unities on it; otherwise there will be no reason why it could be called the bond of them.” In Letter 68, Des Bosses raises the objection that if the modifications of the substantial bond are merely an “echo” of those of the dominant monad, then there will be no reason to ascribe a power or principle of action to the bond. In Letter 69, Leibniz replies that “a body returning an echo is still a principle of action.” At the very least, though, he would have to concede that a substantial bond is not a *spontaneous* source of action in the manner of a monad, which “draw[s] everything from [its] own stores . . . by a certain eminent mechanism.”

96. “Real continuity” is not associated with any difference in the phenomena.

On either account, extended things offer the same appearance of continuity. The difference is that, on the theory of monads, continuity is merely ideal, whereas if a *vinculum* is added it is thereby made real. Compare note 83.

97. One of the sharpest statements of the view appears in Letter 50: “monads in themselves do not even have situation with respect to each other—at least one that is real, which extends beyond the order of phenomena. Each is, as it were, a certain world apart, and they harmonize with each other through their phenomena, and not through any other intrinsic intercourse and connection.” Although Leibniz denies that monads have a real situation with respect to each other, he maintains that they have ideal spatiotemporal and causal relations, which are defined in terms of the content of their perceptions, in particular, each monad’s representation of itself as an embodied creature.

98. Articulating the details of Leibniz’s idealism is a major challenge. Passages in the correspondence can be read as supporting both a reduction of bodies to perceived phenomena and a reduction of bodies to monads, or simple substances. For attempts to reconcile these claims, see Adams 1994; Rutherford 1995; 2004.

99. This caution is supported by two documents from outside the correspondence. They are notable for linking the existence of composite substance to something like a *vinculum*, independently of the question of transubstantiation. In marginalia written between 1715 and 1716 in a book by Aloysius Temmik (see Letter 18), Leibniz addresses the possibility of real unions of monads in a manner consistent with what he says in the Des Bosses correspondence: “If there are real unions, which do not result from the simple positing of unities, then they do not exist through the divine intellect alone, as do mere relations, but in addition through the divine will, which produces a new entity. Such unions are necessary so that corporeal masses may be true beings, and they add something to monads beyond mere relatedness” (Ve 1083). A second, undated study sketches a version of Leibniz’s initial account of the *vinculum* in Letter 48, concluding with a contrast between two rival metaphysical systems: “if we add to the monads the reality of the composites, there arise space, mass, motion, corporeal substance. There are two systems: one, of monads; the other, of real composites. Real composites are two: immovable or immutable, space; mutable are bodies, and these are either aggregates of corporeal substances or substances. Corporeal substances ought therefore to have something real beyond the ingredients; or else there will be nothing but monads. This real superadded thing is what makes the subjecthood of body. If we concede to masses no other reality than that of phenomena, we shall not have need for real space” (LH IV I, 1a Bl. 7). For a full transcription, translation, and commentary, see Look 1998.

100. As he writes to De Volder, “since everything ought to be deduced from the phenomena, by what evidence, I ask, might you prove that there is something real in things beyond these things, something substantial besides these substances, by which appearances that conform to the eternal laws of metaphysics and mathematics arise in things from themselves? Whoever adds anything to these brings nothing about, works vainly at explaining things, and will be faced with inextricable difficulties” (G.ii.275/AG 181).

101. Such an attitude is suggested in the letter to De Volder in which he dismisses Tournemine's demand for a real union of soul and body as "not so much ultramundane as utopian" (G.ii.281/AG 184).

102. For developments of this point, see Adams 1994, 303–07; Antognazza 2007.

103. Hartz 1998.

104. Late in the correspondence (Letter 67), Leibniz admits to Des Bosses that he has never before seriously confronted this problem: "I scarcely know whether my latest response concerning the unification of monads will have pleased you. I fear that the things I have written you at different times on the subject may not agree well enough with one another, since I certainly have not treated this argument concerning the raising of phenomena to reality, that is, composite substances, except on the occasion of your letters."

105. See above, §3. Typical of Leibniz's attempts to reconcile the theory of monads with talk of "organisms" or "organic bodies" is the following passage from a letter to Pierre Dancicourt of 11 September 1716: "I am also of the opinion that, to speak exactly, there is no need of extended substance. . . . True substances are only simple substances or what I call 'monads.' And I believe that there are only monads in nature, the rest being only phenomena that result from them. Each monad is a mirror of the universe according to its point of view and is accompanied by a multitude of other monads which compose its organic body, of which it is the dominant monad" (D III, 499–500).

106. For affirmations of this position, see, e.g., G.iii.606/L 655; G.iii.636/L 659.

Letter 1

1. LBr 95, Bl. 1–2: letter as sent; three quarto sides in Des Bosses's hand. Letter 1 is answered by Letter 2.

2. By his "meager efforts," Des Bosses means the planned summary of Peripatetic philosophy to which he returns at the end of the letter. His remarks suggest that his letter is a response to an earlier communication from Leibniz (now lost) that recalled their "recent hurried conversation" and delivered to Des Bosses the "original [*autograph*]" of Giovanni Battista Tolomei's *Philosophia mentis et sensuum*. In a letter to Tolomei of 17 December 1705, Leibniz reported having received a copy of the book from Des Bosses (G.vii.467). This must have been the expanded second edition, published in Rome in 1702. The first edition of *Philosophia mentis et sensuum* (Rome, 1696) was reprinted in Germany in 1698 and reviewed in the *Acta eruditorum* (Sommervogel 1890, vol. 8, 86). At some point Leibniz apparently obtained a manuscript of the lecture notes on which the book was based, which he exchanged with Des Bosses. Leibniz met Tolomei (1653–1726), professor at the Collegio Romano, in October 1689 during his Italian journey and corresponded intermittently with him for the next twenty-five

years (Robinet 1988, 132–33; Bodemann 1895, 341). He maintained a high opinion of the Jesuit, remarking in a 1702 essay, “The philosophy of the Reverend Father Tolomei, a man well versed in the opinions of both the ancients and the moderns, whose distinguished doctrine I myself examined in Rome, a philosophy which I find most promising, has not yet reached us” (GM.vi.105/AG 256).

3. Tirso González (b. 1624), author of *Fundamentum theologiae moralis* (1654), was superior general of the Jesuits from 1687 until his death on 27 October 1705. The congregation to choose his successor began in Rome on 17 January 1706. Despite Des Bosses’s optimistic predictions in this letter and his next, Tolomei does not seem to have been a serious contender for the position. Relating the outcome of the vote at the end of Letter 5, Des Bosses reports that Tolomei received only four votes on the first ballot and none on the second. See Padberg, O’Keefe, and McCarthy 1994, 373–74.

4. That is, the views of Aristotle, often called “the Stagirite” after his birthplace. The Lyceum, to which Des Bosses refers earlier in the paragraph, was the gymnasium near Athens where Aristotle taught.

5. Ermolao Barbaro (1454–93), Italian humanist, translator of Aristotle’s *Rhetoric* and of ancient commentaries on his works. Barbaro is best known for his debate with Giovanni Pico della Mirandola on the relation of philosophy and rhetoric and for his efforts to distinguish the original content of Aristotle’s views from later Scholastic interpretations of them. Des Bosses owes the anecdote concerning Barbaro’s consultation of a daemon to the anonymous *Colloquium heptaplomeres de abditis rerum sublimium arcanis* (ca. 1593), a work attributed to Jean Bodin. See A VI.ii: 126.

6. Des Bosses quotes, interpolating the words in brackets, from bk. 4, chap. 2, of Fonseca’s commentary on Aristotle’s *Metaphysics*. The passage corresponds to *Metaphysics* 1004b8–10. Pedro Fonseca, S.J. (1528–99), taught philosophy at the University of Coimbra in Portugal. His commentary, which forms part of the famous Coimbran commentaries on Aristotle’s works, was first published in Rome in 1580 and reprinted in many editions. The text to which Des Bosses refers is found in vol. 1, col. 684, of the 1615 Cologne edition.

7. The *Journal des savants*, in which Leibniz’s 1695 essay “Système nouveau de la nature et de la communication des substances, aussi bien que de l’union qu’il y a entre l’âme et le corps” (hereafter “New System”) (G.iv.477–87/AG 138–45) had appeared, along with his replies to various critics and other essays.

8. The *Acta eruditorum*, containing many pieces by Leibniz, including his 1684 exposition of the differential calculus “Nova methodus pro maximis et minimis” (GM.v.220–26) and the important 1698 essay “De ipsa natura, sive De vi insita, actionibusque creaturarum; pro dynamicis suis confirmandis illustrandisque” (hereafter “On Nature Itself”) (G.iv.504–16/AG 155–67).

9. Pierre Bayle (1647–1706), author of the influential *Dictionnaire historique et critique* (1697, 1702). Bayle’s discussion of Leibniz’s views in the articles cited by Des Bosses were instrumental in bringing them to the attention of a wider audi-

ence and elicited two published replies from Leibniz. For the relevant documents and further background, see Woolhouse and Francks 1997.

10. See Leibniz's letters to Tolomei of 6 January and 17 December 1705 (G.vii.462–66, 467–68).

11. William Durandus de Saint-Pourçain (d. 1334) rejected the standard Scholastic view that divine concurrence entails God's immediate cooperation in the actions of finite creatures. He maintained that this concurrence amounts to nothing more than the conservation of the active powers of created things. For Leibniz's rejection of this position, see *Theodicy*, §27; and *Causa Dei*, §§11–12.

12. Johann Christopher Sturm (1635–1703), German natural philosopher, whose writings prompted Leibniz's publication of "On Nature Itself" (see note 8). The text by Sturm to which Des Bosses refers has not been identified; it is likely among the writings cited by Ariew and Garber in the notes to their translation of "On Nature Itself" (AG 155).

Letter 2

1. BN MS f.1. 10355, fols. 93–95: letter as sent; six octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 5–6: draft; two folio sides in Leibniz's hand. Letter 2 answers Letter 1 and is answered by Letter 3.

2. The vicar general (in this case, Tamburini) assumed the authority of the superior general in the event of the latter's death and convened the congregation to elect his successor. These arrangements had been made before González's death. Angelo Alamanni (1637–1710) was rector of the German College in Rome. Michelangelo Tamburini (1648–1730) taught philosophy at Bologna and theology at Mantua, where he later served as rector and provincial.

3. Honoré Fabri (1608–88), Jesuit natural philosopher and mathematician, known to Leibniz since the early 1670s. For their exchange of letters, see A II.i: 185–88, 286–301.

4. Eustache de Saint-Paul (1573–1640), French philosopher and theologian, member of the Cistercian order, was the author of one of the most influential textbooks of Scholastic philosophy in the seventeenth century: *Summa philosophiae quadripartita de rebus dialectica, moralibus, physicis, et metaphysicis* (Paris, 1609), also cited by Descartes as exemplary of its kind (AT III 232).

5. A technical term of Scholastic philosophy, which Leibniz employs in a variety of contexts. *Exigentia* signifies a natural, as opposed to an absolute or metaphysical, necessity. See Aquinas, *Summa theologiae* I, q. 46, art. 1 ad. 10. In the present context Leibniz uses the term to refer to the natural activity of substance, which he contrasts with a mere faculty of acting. See "De primae philosophiae emendatione, et De notione substantiae" (On the Emendation of First Philosophy, and on the Concept of Substance), published in the *Acta eruditorum* in March 1694: "Active force differs from the mere power familiar to the Schools, for the active power or faculty of the Scholastics is nothing but an imminent possibility of

acting, which needs an external excitation or stimulus, as it were, to be transferred into action. Active force, in contrast, contains a certain act or entelechy, and is thus midway between a faculty of acting and action itself and involves an endeavor. It is thus carried into action by itself and needs no help but only the removal of an impediment” (G.iv.469/L 433).

6. See Letter 1, note 12. The account that follows summarizes the argument of “On Nature Itself,” §13.

7. The “Frenchman from your society” is Réne-Joseph de Tournemine (1661–1739), founding editor of the Jesuit journal *Mémoires pour l’histoire des sciences et des beaux arts* (commonly known as the *Mémoires de Trévoux* after its place of publication). In May 1703 Tournemine published in the *Mémoires* his “Conjectures sur l’union de l’âme et du corps,” to which Leibniz refers. By January 1706, Leibniz had sent a response to Tournemine, but it apparently failed to reach its destination, for he later appealed to Des Bosses for help in conveying another copy to the *Mémoires*. It appeared there in March 1708, under the title “Remarque de l’auteur du système de l’harmonie préétablie sur un endroit des *Mémoires de Trévoux* de mois de mars 1704” (G.iv.595–97/AG 196–97). For further details, see Woolhouse and Franks 1997, 246–51. The autograph of Leibniz’s response, which he lent to Des Bosses, is preserved as LBr 95, Bl. 7–8.

Letter 3

1. LBr 95, Bl. 9–11: letter as sent; four quarto sides in Des Bosses’s hand. Letter 3 answers Letter 2 and is answered by Letter 4.

2. In the manuscript Des Bosses wrote *indivisible*, but this is clearly a slip, as Leibniz’s response in Letter 4 bears out.

3. Des Bosses quotes in Latin translation Aristotle’s definition of actions that are “forced” (βίαια) from *Nicomachean Ethics* 1110b1–3.

4. See Letter 1, note 12.

5. See Letter 2, note 7.

6. Des Bosses’s comments refer to the second, unauthorized edition of the *Mémoires pour l’histoire des sciences et des beaux arts*, which began publication in Amsterdam in January 1701. The original plan of this (Protestant) edition was to reprint the successive numbers of the *Mémoires de Trévoux*, “supplemented by various remarks and several new articles.” Doing so led to some confusion, as the same article could be cited according to its appearance in either edition. This is the case, for example, with Leibniz’s reply to Tournemine, which was published in the March 1708 issue of the (French) *Mémoires de Trévoux*, although it cited Tournemine’s article according to its publication date in the Amsterdam edition (see Woolhouse and Franks 1997, 246–49). Contrary to Des Bosses’s suggestion, the Amsterdam edition ceased publication in June 1705; the *Mémoires de Trévoux* itself continued for many years thereafter (Dumas 1936).

7. It is not obvious to which of Aristotle’s texts Des Bosses refers. The context

suggests that by the “parts of a substance,” Des Bosses means not the material parts of a living thing (e.g., the arm and leg of a particular man) but rather its matter and form, identified in this case with the body and the soul. His point is that because these “parts” do not exist independently of the substance in which they are united, there is no need to posit a real relation between them. In *Metaphysics* VIII.6, Aristotle addresses this question in terms of the notions of potentiality and actuality: “if, as we say, one element is matter and another is form, and one is potentially and the other actually, the question will no longer be thought a difficulty. . . . the proximate matter and the form are one and the same thing, the one potentially, the other actually. Therefore to ask the cause of their being one is like asking the cause of unity in general; for each thing is a unity, and the potential and the actual are somehow one” (BA 1650–51).

8. Des Bosses expresses the view of Thomas Aquinas (1225–74), the most influential philosopher and theologian of the medieval period. See Aquinas, *On Being and Essence*, chap. 2, in Bobik 1965, 70. Aristotle distinguishes form from the “concrete substance,” which is the compound of form and matter; however, he identifies “primary substance” with form and not with the form-matter composite (*Metaphysics* 1037a21–30). Aristotle further maintains, in contrast to Aquinas, that the essence of each thing is just its form (*Metaphysics* 1032a1–5).

9. Here and in what follows Des Bosses refers to a pair of theses defended by Aquinas and by his teacher Albert the Great (1206–80): (1) primary matter, as pure potentiality, neither exists nor can be known by itself but only as actualized by form; (2) in any individual there is a single substantial form that actualizes its primary matter, all other forms being accidental (see Weisheipl 1963, 323–25). Leibniz’s approval of the first of these theses can be extracted from a passage in the “New System” to which Des Bosses appears to allude: “So I was obliged to recognize that except for the souls which God still expressly wills to create, the forms which constitute substances have been created with the world and that they will subsist always. Moreover, certain Scholastics like Albert the Great and John [of] Bacon[thorp] had glimpsed a part of the truth about the origin of these forms” (G.iv.479/L 454). In his letter to Arnauld of 9 October 1687 (a text to which Des Bosses did not have access), Leibniz makes the point more explicitly: “Albertus Magnus and John Bacon seem to have believed that substantial forms already lie concealed in matter from eternity” (G.ii.116/L 342).

10. See Letter 2, note 2; and Letter 5, note 7.

Letter 4

1. BN f.1. 10355, fols. 126–127: letter as sent; four quarto sides in secretary’s hand (our printed text). LBr 95, Bl. 11: draft; two folio sides in Leibniz’s hand. The draft includes several significant passages that were deleted before the sent version was written out. These appear as footnotes to the main text. Letter 4 answers Letter 3 and is answered by Letter 5.

2. See Letter 2, note 7.
3. The postscript is missing in the draft. It was added by Leibniz to the sent version.

Letter 5

1. LBr 95, Bl. 12–13: letter as sent; three quarto sides in Des Bosses's hand. Letter 5 answers Letter 4 and is answered by Letter 6.
2. Konrad Barthold Behrens (1660–1736), Hildesheim physician and author, was a longtime friend of Leibniz. In 1712 he was appointed court physician to the Duke of Brunswick. See Bodemann 1895, 12.
3. “Mémoire de Mr. Leibnitz touchant son sentiment sur le calcul différentiel,” *Mémoires de Trévoux*, November 1701 (GM.v.350).
4. “Specimen dynamicum, pro admirandis naturae legibus circa corporum vires et mutuas actiones detegendis, et ad suas causas revocandis” (hereafter “Specimen of Dynamics”), *Acta eruditorum*, April 1695 (GM.vi.238/AG 121).
5. In medieval logic, terms were divided into the categorematic, which signify in their own right; and the syncategorematic, which signify only when combined with other terms. Examples of the latter include prepositions, conjunctions, and signs of quantity.
6. “On Nature Itself,” §12 (G.iv.511/AG 162–63).
7. Of those not already mentioned, Daubenton (1648–1723) was confessor to Philip V of Spain and elector of the Jesuit province of Campania, Imperiale was provincial of the province of Milan, and Sesti (1633–1715) was provincial of the province of Rome (Padberg, O’Keefe, and McCarthy 1994, 373–74).
8. Tolomei was eventually elevated as a cardinal in 1712. See Letter 51.

Letter 6

1. BN MS f.1. 10355, fols. 134–37: letter as sent; eight quarto sides in secretary’s hand with additions by Leibniz (our printed text). LBr 95, Bl. 14–15, 18–19: copy; six and three-quarter quarto sides in secretary’s hand, heavily revised by Leibniz. LBr 95, Bl. 16–17: partial draft; two and one-half quarto sides in Leibniz’s hand. Letter 6 answers Letter 5 and is answered by Letter 7.
2. In Letter 4, Leibniz had announced his upcoming journey to Brunswick and Berlin.
3. See Introduction, §6.
4. *In actu exercitu*, a Scholastic expression signifying an act that is exercised or effected, as opposed to one that is only designated or prearranged (*in actu signatu*). See *Causa Dei*, §83; and Brunschwig 1969, 494, n. 581.
5. Thomas Gouye, S.J. (1650–1725), professor of mathematics at a number of Jesuit colleges and, from 1699, an honorary member of the Académie des Sciences.

He made many communications to the Académie, among which may be the objection to which Leibniz alludes. See Sommervogel 1890, vol. 3, 1640–41.

6. As Leibniz makes clear, by “machine” he means an organic body or “machine of nature.” See “Principles of Nature and of Grace,” §3 (G.vi.599/AG 207).

7. By an “adequate” entelechy Leibniz means one whose activity is harmonized to that of the body whose soul or active principle it is. The primary entelechy of an organic machine is adequate to the body as a whole, which in turn is composed of organic bodies enveloped within organic bodies ad infinitum. Each of these is endowed with its own partial entelechy adequate to it but inadequate to the body as a whole.

8. In the draft, Leibniz wrote “spiritual substance [*substantiam spiritualem*].”

9. See “New System” (Letter 1, note 7) and the texts included in Woolhouse and Francks 1997.

10. “On Nature Itself” (Letter 1, note 8).

Letter 7

1. LBr 95, Bl. 20–21: letter as sent; three quarto sides in Des Bosses’s hand. Letter 7 answers Letter 6 and is answered by Letter 8.

2. *De la tolérance des religions. Lettres de M. de Leibniz, et réponses de M. Pellisson, ou Quatrième partie des Réflexions sur les différends de la religion* (Paris, 1692). Paul Pellisson-Fontanier (1624–93) was court historian to Louis XIV and a convert to Roman Catholicism; his *Réflexions sur les différends de la religion* (1686–92) occasioned an exchange of letters with Leibniz on the subject of church reunion, culminating in the first-named volume above. For further discussion, see Antognazza 2002.

3. Here Leibniz added the following note to the manuscript of Des Bosses’s letter: “I do not admit this except in things necessary for salvation. But it will be a very long time before we have an ecumenical council [*Hanc non admitto nisi in necessariis ad salutem. Sed diutissime Concilia Oecumenica non habemus*].”

4. Isaac Jaquelot, *La conformité de la foi avec la raison, ou défense de la religion contre les principales difficultés répandue dans la “Dictionnaire . . .” de M. Bayle* (Amsterdam, 1705). Jaquelot (1647–1708), court chaplain to the French colony in Berlin, met Leibniz in 1702. He subsequently advanced criticisms of Leibniz’s system of preestablished harmony, particularly in connection with the question of human freedom. See Woolhouse and Francks 1997, 171 ff.

5. Pierre-Daniel Huet, *Demonstratio evangelica ad serenissimum delphinum* (Paris, 1679; 3rd ed. 1690). Huet (1630–1721), sometime bishop of Avranches, is best known for his fideism and critique of Cartesianism, contained in *Censura philosophiae cartesianae* (Paris, 1689). Leibniz met Huet in Paris in 1673 and was encouraged by him to undertake an edition (never completed) of the writings of the fifth-century philosopher Martianus Capella. Their correspondence continued until at least 1695 (G.iii.19). See Bodemann 1895, 96; Müller and Krönert 1969, 34.

6. In 1670 Leibniz published in Frankfurt an edition of Marius Nizolius's *De veris principiis et vera ratione philosophandi contra Pseudophilosophos* (1553). In it he included a prefatory essay on the proper use of philosophical language, as well as a revised version of his 20/30 April 1669 letter to Jacob Thomasius on the reconciliation of Aristotle and modern philosophy. See G.iv.138–76/L 121–30, 93–104; and Ravier 1937, 17.

7. During the late 1680s Leibniz was assigned the task of writing a comprehensive history of the house of Brunswick. It became an increasing burden on his time, as he complains in a 1695 letter to Vincent Placcius: “It cannot be said how extraordinarily distracted I am. I dig things out of the archives, I inspect old papers, I search for unknown manuscripts. From these I try to throw light on the history of Brunswick. I send and receive a great number of letters. I truly have so many new results in mathematics, so many philosophical ideas, so many other scholarly observations that I would not want to lose, that I often hesitate, wavering between tasks, and feel almost like that line from Ovid: *Inopem me copia fecit* [I am made poor by my riches; *Metamorphoses* III.465]. . . . Nevertheless, all these labors of mine, if you exclude the historical, are almost clandestine, for you know that at the court something far different is sought and expected.” (D VI.1, 59–60).

8. Romans 7:23.

9. Matthias Flaccius Illyricus (1520–75), historian and Lutheran apologist, author of *Catalogus testium veritatis* (Basle, 1556).

10. Daniel Papebroch (1628–1714), Antwerp Jesuit and editor of the *Acta sanctorum*, conducted a long (1686–1709) correspondence with Leibniz, chiefly on topics relating to his historiographical work. See Bodemann 1895, 215–16.

Letter 8

1. BN f.1. 10355, fol. 97: letter as sent; two quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 22: draft; two quarto sides in Leibniz's hand. Letter 8 answers Letter 7 and is answered by Letter 9.

2. Jacques-Bénigne Bossuet (1627–1704), bishop of Meaux, one of the leading French theologians of the seventeenth century. His correspondence with Leibniz on the topic of church reunion tempered Leibniz's most ambitious hopes for a reconciliation of the Protestant and Roman Catholic faiths. See Bodemann 1895, 22.

3. Compare the following from Leibniz's letter to Arnauld of 9 October 1687: “Expression is common to all forms and is a genus of which natural perception, animal sensation, and intellectual knowledge are species. In natural perception and sensation it suffices that what is divisible and material and is found dispersed among several beings should be expressed or represented in a single indivisible being or in a substance endowed with a true unity. The possibility of such a representation of several things in one cannot be doubted, since our soul provides us with an example of it” (G.ii.112/L 339).

4. That is, for the Jesuit Daniel Papebroch (Letter 7, note 10). For the contents of the letter, see Bodemann 1895, 215.

Letter 9

1. LBr 95, Bl. 23: letter as sent; two quarto sides in Des Bosses's hand. Letter 9 answers Letter 8 and is answered by Letter 10.

2. The condemnation of Cartesianism was instigated by the newly elected superior general of the Jesuits Michelangelo Tamburini (Letter 5). For further details, see Ariew 1994a, b.

Letter 10

1. BN f.1. 10355, fols. 85–86: letter as sent; four octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 24–25: copy; four quarto sides in secretary's hand with corrections by Leibniz. LBr 95, Bl. 26: supplementary study; one octavo side in Leibniz's hand. Letter 10 answers Letter 9 and is answered by Letter 11.

2. That is, the *Acta sanctorum* (see Letter 7, note 10). Des Bosses's previous communication evidently carried with it a letter from Father Konrad Janninck (1650–1723), another Antwerp Jesuit, in partial reply to Leibniz's letter to Papebroch of 11 July (see Letter 8). Leibniz replied to Janninck in a letter dated 20 September 1706, which was included with his letter to Des Bosses of the same date (Letter 12). See Bodemann 1895, 216.

3. Leibniz wrote to Tolomei on 17 December 1705, in a letter that contained a remarkably revealing presentation of his metaphysics (G.vii.467–68). No response seems to have been forthcoming from Tolomei until June 1708 (G.ii.350). In his letter to Des Bosses of 24 December 1707, Leibniz asked whether he had “heard anything further from our Tolomei” (G.ii.344). In February of the following year, he called on Des Bosses's help in conveying another letter to Tolomei (G.ii.347).

4. Mutius Vitelleschi (1563–1645), elected superior general of the Jesuits in 1615. As Des Bosses indicates in Letter 11, the ban in question was promulgated by Vitelleschi's successor, Francisco Piccolomini.

5. See “G.G.L. brevis demonstratio erroris memorabilis Cartesii et aliorum circa legem naturae” (A Brief Demonstration of a Notable Error of Descartes and Others concerning a Law of Nature), *Acta eruditorum*, March 1686 (GM.vi.117–19/L.296–301).

6. As Adams notes (1994, 297), proposition 22 enunciates a view that might plausibly be ascribed to Leibniz. Here, as in his reply to Tournemine, however, he resists the conclusion that the union of soul and body can be reduced to preestablished harmony. See Introduction, §7.

7. Leibniz mistakenly wrote 29.

8. Written on a separate slip of paper and crossed through by Leibniz.

Letter 11

1. LBr 95, Bl. 27–28: letter as sent; four quarto sides in Des Bosses's hand. Letter 11 answers Letters 8 and 10 and is answered by Letter 12.

2. Aristotle, *Physics* 215a24–b22.

3. Francisco Piccolomini, *Ordinatio pro studiis Superioribus e Deputatione, quae de illis habita est e Congregatione IX generali, ad Provincias missa A. 1651* (Rome, 1655). Piccolomini (1582–1651) was elected superior general of the Jesuits in 1649. Sommervogel 1890, vol. 6, 700.

4. See Letter 8, note 3.

Letter 12

1. BN f.1. 10355, fol. 12: letter as sent; two quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 29: draft; two quarto sides in Leibniz's hand. Letter 12 answers Letter 11 and is answered by Letter 13.

2. The source of Leibniz's information was Quesnel himself, in a letter dated 12 September 1706 (Bodemann 1895, 227). Letter 12 marks the beginning of an extended discussion of the Jansenist controversy, in which the Jesuits were an active party. See Introduction, §5.

3. The difference between this paragraph and the corresponding passage in the draft is striking. The latter, especially the bracketed sentence, appears to represent Leibniz's candid assessment of the Jansenist controversy. Accordingly, his decision to omit this text from the final version of the letter is significant, suggesting second thoughts about the appropriateness of sending it to Des Bosses, a member of the same Jesuit order that had attacked Arnauld and Quesnel.

4. Missing in draft.

Letter 13

1. LBr 95, Bl. 30–31: letter as sent; two and one-half octavo sides in Des Bosses's hand. Letter 13 answers Letter 12 and is answered by Letter 14.

2. Filed as LBr 95, Bl. 42: two quarto sides excerpted from Martín de Esparza Artieda, *Quaestiones disputandae de angelis* (Rome, 1659), q. 1, arts. 11–13. Esparza (1606–89) taught theology at Valladolid, Salamanca, and Rome. For a complete list of his writings, see Sommervogel 1890, vol. 3, 449–52.

3. *Causa Quesnelliana, sive, motivum juris: pro procuratore Curiae Ecclesiasticae Mechliniensis actore contra P. Paschasium Quesnel cui dein accessit sententia ab Archiepiscopo Mechliniensi, Belgii Primate, &c. in Quesnellum lata* (Brussels, 1704). The work was compiled on the order of the archbishop, in whose prison Quesnel had been held. See Introduction, §5.

Letter 14

1. BN f.1. 10355, fols. 101–02: letter as sent; three quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 31: draft; one and one-half octavo sides in Leibniz's hand appended to Des Bosses's letter of 29 September 1706. Letter 14 answers Letter 13 and is answered by Letter 15.

2. In the draft, there followed a sentence omitted in the sent version of the letter: "In fact, scripture and tradition favor my view [*Quin potius scriptura et antiquitas meae sententiae favent*]." Leibniz's reference is to the Fourth Lateran Council (1215), which decreed that angels are spirits without bodies and that the opinion that they have an ethereal body is unsupported, since it found no defender in the discussion. Leibniz's point is that the council did not advance this as a definition or as a dogma of faith, but simply as the conclusion of its examination of the topic (Frémont 1999, 112).

3. See *Theodicy*, §310 (G.vi.300), where Leibniz makes the same comparison, citing Suárez's *Treatise on Prayer*, bk. I, chap. 11.

4. Leibniz's citations of Augustine and Aquinas are based on the excerpt from Esparza that Des Bosses had submitted to him. See Letter 13, note 2.

5. Though seemingly of narrow interest, the question of the embodiment of angels goes to the heart of Leibniz's theory of monads. He is clear that whatever it is proper to say about angels must be consistent with the basic tenets of his metaphysics. In this letter, he stresses two points. (1) Angels are not wholly incorporeal beings. As spiritual substances, they are always united to organic bodies, which they animate and command (according to the laws of preestablished harmony). Hence, they are properly described as entelechies. (2) In contrast to lesser "inhering forms," angels are not permanently attached to any particular body. They are able to "change bodies, or pass from body to body," at will, provided this happens "through degrees," that is, in a manner consistent with the principle of continuity, and "through the very laws of bodies." Left unresolved is the modal status of the claim that no monad (and *a fortiori* no spiritual substance) can be completely separated from a body. As Leibniz implies in passages deleted from the draft of Letter 12, and argues explicitly in Letter 16, the claim is one of hypothetical or natural necessity, not one of metaphysical necessity.

Letter 15

1. LBr 95, Bl. 32–33: letter as sent; three quarto sides in Des Bosses's hand. Letter 15 answers Letter 14 and is answered by Letter 16.

2. Martín de Esparza Artieda, *Quaestiones disputandae de angelis*, q. 5, art. 5. See Letter 13, note 2.

3. Thomas Aquinas, *Summa theologiae* I, q. 112, arts. 1–4. See Letter 13 and Frémont 1981, 99, n. 3.

4. Des Bosses had incorrectly written "note I."

5. Gabriel Gerberon (1628–1711), a Benedictine of the Maurist congregation, sometime abbé of Corbie, and author of a number of Jansenist works, published under various pseudonyms. They include *Le miroir de la piété chrétienne* (Liège, 1676) and *Histoire générale du Jansénisme*, 3 vols. (Amsterdam, 1700). Gerberon had been arrested with Quesnel in Brussels in 1703. See Introduction, §5.

6. Hilaire Dumas (d. 1742), *Histoire des cinq propositions de Jansénius, avec des éclaircissements* (Liège, 1699; Trévoux, 1702).

Letter 16

1. BN f.1. 10355, fols. 138–39: letter as sent; three quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 34: draft; one and three-quarter quarto sides in Leibniz's hand. Letter 16 answers Letter 15 and is answered by Des Bosses's letter of 22 October 1706.

2. See the second paragraph of Letter 15.

3. In the draft, Leibniz added in parentheses: "to be sure, secondary matter [*materiam (secundam scilicet)*]."

4. In the draft Leibniz added: "although it requires it [*etsi eam exigat*]."

5. In the draft Leibniz wrote: "created substance [*substantiam creatam*]."

6. The preceding paragraphs address the modal question posed in Letter 14, note 5. For further discussion, see Introduction, §8.

7. Anton Ulrich, duke of Brunswick-Wolfenbüttel (1633–1714). From 1685 he ruled the principality jointly with his older brother Rudolf August, becoming sole sovereign upon the latter's death in 1704. He significantly expanded the celebrated Bibliotheca Augusta, founded by his father, and employed Leibniz there as librarian. He converted to Roman Catholicism in 1709.

8. In his letter of 22 October, Des Bosses kindly declined Leibniz's invitation: "But to speak candidly, most distinguished Sir, the fact is that I am accustomed to interacting almost exclusively with books, and I fear that I would present myself to such a prince as a less than expert courtier" (LBr 95, Bl. 36).

Letter 17

1. BN f.1. 10355, fols. 87–88: letter as sent; four octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 39: draft; one and three-quarter quarto sides in Leibniz's hand appended to Des Bosses's letter of 1 December 1706. Both Dutens and Gerhardt mistakenly date this letter 1 February 1707. Letter 17 answers Des Bosses's letter of 1 December 1706 and is answered by Letter 18. Leibniz departed Hanover around the end of October 1706, journeying first to Wolfenbüttel and Brunswick. On 13 November he was in Helmstedt, where he wrote Des Bosses to report that he was traveling on to Berlin. Des Bosses's letter of 1 December was addressed to Hanover, and there appears to have been some delay before it reached Leibniz in Berlin.

2. In his letter of 1 December, Des Bosses asked Leibniz whether he had seen the book in question, whose complete title he gave as *Historiae controversiarum de Divinae Gratiae Auxiliis sub summis Pontificibus Sixto V, Clemente VIII et Paulo V Libri sex, quibus demonstrantur ac refelluntur errores et imposturae innumerae, quae in Historia Congregationum de Auxiliis edita sub nomine Augustini Le Blanc notatae sunt, et refutantur acta omnia congregationum quae sub nomine Fratris Thomae de Lemos prodierunt. Auctore Theodore Eleuthiero Theologo. Antverpiae typis Petris Jacobs cum Privilegio et approbatione 1705*. He indicated that the author was believed to be Father Liévin de Meyere (1655–1730), at the time rector of the Jesuit college at Louvain (Sommervogel 1890, vol. 5, 1039). In his letter Des Bosses went on to discuss the Church's position on the Jansenist controversy, to which Leibniz's subsequent remarks are a reply.

3. Cardinal Robert Bellarmine (1542–1621), the most distinguished Jesuit theologian of the previous century, best known for his role in the trials of Giordano Bruno and Galileo, and for his massive *Disputationes . . . de controversiis fidei christianae*, first published in 1587 (Sommervogel 1890, vol. 1, 1151 ff.). For Leibniz's notes on this work, see Grua 292–98.

4. The propositions in question are the five alleged to be found in Jansen's *Augustinus*. See Introduction, §5.

5. Edmund Halley, *Apollonii Pergaei de sectione rationis libri duo ex Arabico MS Latine versi* (Oxford, 1706). Halley (1656–1742), the renowned English astronomer and mathematician, published the first modern edition of Apollonius's *Conics* in 1710 while holding the Savilian Chair of Geometry at Oxford. It was based in part on a copy of an Arabic manuscript procured by Edward Bernard, the Savilian Professor of Astronomy. On the circumstances of the edition and its reception, see Cook 1998, 333–41. Halley met Leibniz in Hanover during the summer of 1703 and received at least two letters from him (Bodemann 1895, 78).

6. Nicolas Hartsoeker (1656–1725), Dutch natural philosopher. His *Conjectures physiques* (Amsterdam, 1706) developed the system advanced in his earlier *Principes de physique* (Paris, 1696). Leibniz's comments give a good sense of his opinion of Hartsoeker's work. For their exchange of letters, conducted between 1706 and 1712, see G.iii.488–535. Leibniz and Des Bosses resume their discussion of Hartsoeker's views in Letter 40.

7. Tolomei's "Supplement to Bellarmine's *Controversies*" remained unpublished. See *Theodicy*, preface (G.vi.46); and Sommervogel 1890, vol. 8, 88.

Letter 18

1. LBr 95, Bl. 40–41: letter as sent; three quarto sides in Des Bosses's hand. Letter 18 answers Letter 17 and is answered by Letter 19. In a letter dated 23 June 1707, Leibniz announced his arrival back in Hanover after a seven-month stay in Berlin. In a letter dated 26 June, Des Bosses acknowledged receiving this letter the

same day he dispatched Letter 18 to Leibniz. Its opening paragraph suggests that Des Bosses had learned of Leibniz's return before receiving the news from Leibniz.

2. See Letter 17, note 2.

3. Henri Joseph van Susteren, *Processus officii fiscalis curiae ecclesiasticae mechliniensis contra dominum Gabrielem Gerberon, ordinis S. Benedicti congregationis S. Mauri religiosum presbyterum, qui, e Gallia profugus, sub veste laica et nomine ficto Augustini Kergé in Belgio per plures annos latitaverat* (Brussels, n.d.). On the other two volumes, see Letter 13, note 3; and Letter 15, note 6.

4. Fénelon (François de Salignac de Lamothe) (1651–1715), archbishop of Cambrai, was a dominant figure in the French Catholic church during the period. Best known for his leading role in the quietist controversy, Fénelon vigorously defended the infallibility of the Church in its pronouncements concerning the heterodoxy of Jansenist texts. Des Bosses likely refers to a series of *Instructions pastorales* that Fénelon published during 1704–5. See “Fénelon,” in *Dictionnaire de théologie catholique*, vol. 5, 2158–60.

5. Des Bosses refers to the third of the Jansenist propositions condemned in the papal bull *Cum occasione*: “In order to deserve merit or demerit in the state of fallen nature, freedom from necessity is not required in man; freedom from constraint is sufficient.” See Denzinger 1991, 614.

6. Pierre Nicole (1625–95), collaborator with Antoine Arnauld on the “Port-Royal Logic” and other works, distinguished himself from the Jansensists on the question of grace. In the interests of avoiding an open confrontation with Arnauld, his writings on the topic were not published until after his death in *Le système de M. Nicole touchant la grâce universelle* (Cologne, 1699). This work was reviewed in the *Mémoires de Trévoux* of March 1702, 65–76. See “Nicole,” in *Dictionnaire de théologie catholique*, vol. 10, 643–44.

7. Aloysius Temmik, *Philosophia vera Theologiae et Medicinae Ministra, in Theatrum Mundi dijudicanda* (Cologne, 1706). Leibniz queried Des Bosses about this work in a letter dated 13 November 1706. The true identity of the author remains unknown (Sommervogel 1890, vol. 7, 1923). Leibniz owned a copy of the book and appears to have studied it closely. His notes on the book, dating from 1715–16, are preserved as LH IV 8 Bl. 60–61 (Ve 1082–88).

8. Isaac Newton, *Philosophiae naturalis principia mathematica* (London, 1687). Leibniz responds to Des Bosses's query in Letter 19.

9. See Letter 5, note 2; and Letter 10, note 2.

Letter 19

1. BN f.1. 10355, fols. 130–33: letter as sent; eight quarto sides in secretary's hand with additions by Leibniz (our printed text). LBr 95, Bl. 45–46: draft; four quarto sides in Leibniz's hand. Letter 19 answers Letter 18 and Des Bosses's letter of 26 June 1707. Des Bosses's reply is not extant.

2. See Letter 18, note 7.

3. As Des Bosses finally was able to tell Leibniz after the latter's repeated entreaties, Thomas Bonart was the pseudonym of an English Jesuit, Thomas Barton. After his views had been censured by the Jesuits' general, who reported him to the tribunal of the Holy Inquisition, Barton left the Jesuits and sought refuge in Ireland (G.ii.363–64). *Concordia scientiae cum fide* (Cologne, 1659) is the only work known to be by him. Leibniz was extremely interested in the book; during the same period he also wrote to Thomas Burnett inquiring about Barton's identity (G.iii.316). Leibniz mentions Barton's book twice in the *Theodicy*, in the preface and in the "Preliminary Discourse on the Conformity of Faith with Reason," where he describes the work as "ingenious and learned, but harsh and obscure" and concedes that it contains "unsustainable views" (§86). Couturat (1901, 539–41) confuses Barton with Thomas White (also known as Thomas Albius), the English Catholic philosopher and friend of Kenelm Digby, whose works Leibniz had known since the late 1660s. White also was a priest whose views were condemned by Rome, but he was not a Jesuit.

4. See note 17.

5. Antonio Perez (1599–1649), Spanish Jesuit, professor of theology at Salamanca and at the Collegio Romano. Leibniz responds here to a passage from the fourth of Perez's six treatises on the second and third parts of Aquinas's *Summa theologiae*, the *Tractatus de virtutibus theologicis* (Lyons, 1669), from which Des Bosses had quoted in his letter of 26 June.

6. See "New System" (G.iv.482–83/AG 142).

7. See Letter 17, note 6.

8. See *Principia*, bk. II, proposition 40, problem 9, scholium, where Newton proposes fourteen experiments on the resistance of a globe in various media (Newton 1999, 750–61).

9. Virgil, *Aeneid* VI.834–35 (from Mandelbaum 1985).

10. See Letter 15, note 5.

11. Possibly an allusion to *Aeneid* VI.179 ff., which recounts Aeneas's quest for the golden bough that would allow him access to the underworld.

12. Leibniz's notes on Jansen's *Augustinus* are preserved as LH I 4, Bl. 29–40 (Grua 257).

13. Leibniz's disapproval is directed at Jansen's efforts to drive out Pelagian and Semi-Pelagian views, not at the views themselves. Pelagianism is the fifth-century heresy, attacked by Augustine, which claims that human beings, after the fall of Adam, can perform actions meriting salvation by their own free will, independently of divine grace. Semi-Pelagianism is a label ascribed to sixteenth-century followers of Luis de Molina, who maintained that, even if human beings cannot achieve salvation without divine grace, they can contribute to their salvation by the use of their natural powers acting apart from grace. See "Pélagianisme," in *Dictionary de théologie catholique*; and, for a clear presentation of Jansen's views, Kremer 1994.

14. See Letter 15, note 6.

15. See Letter 18, note 4.

16. Leibniz's argument echoes Galileo's defense (against his Jesuit critics) of the distinction between knowledge of nature, which is based on observation and reason, and knowledge necessary for salvation, which is based on scripture. See Galileo's 1615 "Letter to the Grand Duchess of Tuscany" (Galilei 1957). This point would not have been lost on Des Bosses, given Leibniz's example of the motion of the Earth.

17. That is, Fathers Papebroch and Janninck (see Letter 10, note 2). The note contained a query concerning the history of the house of Brunswick.

18. Frémont (1981, 113) offers the following summary of the affair: "The text to be rebutted was Blondel's report, published in the *Mémoires de Trévoux* of February 1706, of the meeting of the Académie des Sciences Royale of 14 November 1705, in the course of which Fontanelle delivered the eulogy for Jacob Bernoulli, who had died on 16 August 1705. This eulogy had been the object of a report by J. Bernard in the *Nouvelles de la République de Lettres* of February 1706, which attributed the invention of the infinitesimal calculus to the Bernoulli brothers. Leibniz, with the approval of Johann Bernoulli, sent a rebuttal which appeared in the *Nouvelles* of November 1706: 'Remarque de M.D.L. sur l'Article V des Nouvelles de la République de Lettres du mois de Février 1706. Envoyée à l'Auteur de ces Nouvelles' (GM.v.389–92). As the *Mémoires de Trévoux* had given a report of the same eulogy, Leibniz maintained that they, too, should print his rebuttal, and he asked Des Bosses to take charge of the matter with Blondel and the editors at Trévoux." It appeared there in the issue of March 1707 under the title "Lettre de Mr. Leibnitz sur quelques faits qui le regardent, mal expliqués dans l'Eloge de Mr. Bernoulli prononcé à l'Académie des Sciences."

Letter 20

1. BN f.1. 10355, fols. 89–90: letter as sent; three and one-half octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 65: draft; two quarto sides in Leibniz's hand. Letter 20 answers Des Bosses's letters of 10 August and 14 August 1708, and is answered by Des Bosses's letter of 11 September 1708.

2. Leibniz had spent most of the month of August in Brunswick, returning to Hanover on 29 August (Müller and Krönert 1969, 210).

3. Ferdinand Orban, S.J. (1655–1732), confessor to Elector Johann Wilhelm von der Pfalz, corresponded with Leibniz between 1705 and 1716, mainly on political and historical topics. In his letter of 14 August, Des Bosses forwarded a letter from Orban to Leibniz. Leibniz replied to Orban in a letter dated 4 September 1708 (Bodemann 1895, 210–11).

4. See Letter 2, note 7.

5. See Letter 19, note 18.

6. Johann Georg Eckhart, Leibniz's secretary and collaborator on the history of the house of Brunswick, was appointed professor of history at the University of

Helmstedt in 1706. In his letter of 10 August, Des Bosses indicated Tournemine's interest in initiating an exchange with Eckhart, as well as learning more about Leibniz's recent activities (G.ii.353–54).

7. William Ayleworth (1621–79), English-born Jesuit, taught philosophy and theology at Liège. His sole published work is *Metaphysica scholastica, in qua pleraeque philosophicae, et non paucae theologicae difficultates elucidantur* (Cologne, 1675) (Sommervogel 1890, vol. 1, 711). In his letter of 10 August, Des Bosses quoted a passage from Ayleworth's book that he claimed was a response to the views of the pseudonymous Thomas Bonart (see Letter 19, note 3).

8. Roswita (or Hrosvitha) (ca. 935–972) was born in Gandersheim, near Göttingen, and became canoness of a Benedictine convent. She produced a variety of literary works, including six Latin plays in the style of Terence, the first such works known to be by a woman author.

9. Conrad Celtes (1459–1508), noted German humanist, rediscovered Roswita's Latin poems in the Benedictine monastery of St. Emmeram at Ratisbon and published the first edition of them in 1501. Conrad Samuel Schurzfleisch (1641–1708), director of the ducal library at Weimar, published his edition of Roswita's works in 1707.

10. Leibniz had recently published the first volume of documents relating to the history of the house of Brunswick under the title *Scriptores rerum Brunsvicensium* (Hanover, 1707). He was eager to present a copy of the work (1,004 pages in folio) to the Antwerp Jesuits Papebroch and Janninck, to whom he acknowledged owing much (G.ii.352). Anticipating that a second volume would appear by the next fall book fair, he had decided to send the two books at the same time (G.ii.351). In his letter of 10 August, Des Bosses suggested as an alternative that the first volume be delivered by a coachman who was passing through Brunswick (LBr 95, Bl. 62). When this plan fell through, Leibniz proposed that it be entrusted to Förster, who was also the book's publisher. As it turned out, the second volume, *Scriptorum Brunsvicensia illustrantium Tomus Secundum*, was not published until 1710 (Ravier 1937, 33–34).

11. A "wayfarer" is one who tends toward beatitude, or a state of blessedness, as opposed to one who is already "confirmed" in such a state. See Aquinas, *Summa theologica* III, q. 15, art. 10.

12. Compare *Theodicy*, §288: "I have shown that freedom, such as is required in the schools of theology, consists in *intelligence*, which involves a distinct knowledge of the object of deliberation; in *spontaneity*, with which we determine ourselves; and in *contingency*, that is, in the exclusion of logical or metaphysical necessity" (G.vi.288).

13. Frémont (1981, 122) supplies the following background to the works in question: "*Le Comte de Gabalis ou Entretiens sur les Sciences secrètes*, by the Abbé de Montfaucon de Villars, was published in Paris in 1670 by Claude Barbier. *La Suite de Comte de Gabalis ou Nouveaux Entretiens sur les Sciences secrètes touchant la nouvelle philosophie*, by the same abbé, was published in Amsterdam

by E. Roger in 1708. Numerous editions of the *Comte* and the *Suite de Comte* followed in London and Amsterdam until 1742, testifying to the persisting interest in the occult sciences during the Classical age. Leibniz cites an undated edition: *Histoire secrète du Comte de Gabalis, ou Nouveaux Entretien*, which in fact was published in Amsterdam by Pierre Mortier.”

14. Leibniz refers to his conversations with Queen Sophie Charlotte at her palace at Lützenburg near Berlin in the summer of 1702. See Müller and Krönert 1969, 179. A summary of his written comments is found in “Theodicée ou apologie de nos notions des attributs de Dieu à l’occasion des derniers écrits de M. Bayle” (Grua 495–98).

15. Jean Dez (1643–1712) occupied a number of posts within the Society of Jesus, including three terms as rector of the Jesuit college in Strasbourg. His works include the controversial *Articuli fidei praecipui ad unionem utriusque Ecclesiae, Romano-catholicae et Lutheranae* (Strasbourg, 1685), placed on the Index in the year of its publication; and *Ad virum nobilem de Cultu Confucii et primogenitorum apud Sinas* (Liège, 1700) (Sommervogel 1890, vol. 3, 30–34). François d’Aix de la Chaise, S.J. (1624–1709), had been confessor to Louis XIV (“the most Christian king”) since 1675. Frémont (1981, 212) suggests that “Hedraeus” refers to the astronomer Benedictus Hedraeus, author of *Nova et accurata astrolabii geometrici structura* (Leiden, 1643). This is impossible, as Hedraeus, a Swede, died in 1659.

Letter 21

1. BN f.1. 10355, fol. 71: letter as sent; one and one-half quarto sides in Leibniz’s hand (our printed text). LBr 95, Bl. 68: draft; one and one-half octavo sides in Leibniz’s hand. Letter 21 answers Des Bosses’s letter of 11 September 1708 and is answered by Letter 22.

2. The translation expands the sentence fragment (in French) that Leibniz quotes from his letter to Blondel of the same month. The letter was conveyed to Blondel, a fellow Jesuit, by Des Bosses. See Letter 19, note 18; and Frémont 1981, 124–25.

3. In the draft Leibniz wrote “unbaptized [*non baptizatorum*].”

4. For further discussion of the distinction between God’s antecedent and consequent will, and its application to the issues of election and grace, see *Theodicy*, §§22–25, 77–85.

5. On these distinctions, see *Theodicy*, §§35–58; and Introduction, §5.

6. See Letter 20, note 13.

7. The offensive couplet appears to have been quoted in Des Bosses’s letter of 11 September, to which this letter is a response. This remains a conjecture, as the relevant lines have been rendered illegible, presumably by Leibniz. Des Bosses’s reply (Letter 22) reveals that the author of the offending lines was Johannes Rempius (1663–1744), a Jesuit who later joined the Benedictine order. Des Bosses first brought Rempius to Leibniz’s attention in a letter of 23 December 1707, which in-

cluded the transcription of a satirical poem believed to be by Rempius (see G.ii.343). This text is preserved as LBr 95, Bl. 47. In his reply, dated 24 December, Leibniz wrote: “The satirical verses which you sent are not inelegant. Whether or not they are rightly associated with Rempius, I shall not say, nor do I care to know. For I have not read his polemical writings, nor am I going to read them” (G.ii.343).

8. In the draft the paragraph continued: “That much I gather from the few lines that are presented.” Des Bosses had quoted from Bosch’s poem in his letter of 11 September (LBr 95, Bl. 67). It appears in the latter’s *Symbolographia sive de arte symbolica sermones septem* (Augsburg, 1702). Jacob Bosch (d. 1704) entered the Society of Jesus in 1652 and served in a number of positions in Switzerland and in Rome (Sommervogel 1890, vol. 1, 1824–26).

9. See Letter 20, note 15. Landgrave Ernst von Hessen-Rheinfels is best known for his role as intermediary in Leibniz’s correspondence with Antoine Arnauld. See Sleight 1990, chap. 2.

Letter 22

1. LBr 95, Bl. 69–70: letter as sent; two and one-quarter quarto sides in Des Bosses’s hand. Letter 22 answers Letter 21 and is answered by Letter 23.

2. See Letter 20, note 3.

3. Acts 10.

4. See Letter 13, note 2.

5. In addition to his appointment at the Collegio Romano, Gormaz (1650–1708) taught at a number of schools in his native Spain and served as provincial of Aragon. His *Cursus theologicus* was published in 1707.

6. On Perez, see Letter 19, note 5. The work to which Des Bosses refers is Perez’s *In primam partem D. Thomae tractatus V. Opus posthumum* (Rome, 1656). For further discussion, see Knebel 1991, 11, 21–22.

7. John Chrysostom (347–407) was bishop of Constantinople from 398 until his death. He is generally considered the most distinguished doctor of the Greek church.

8. Gabriel Vasquez, S.J. (1549?–1604), professor of theology at Alcalá and at the Collegio Romano. His most important works appeared posthumously: *Commentariorum ac Disputationum in (partes) S. Thomae*, 8 vols. (Alcalá, 1598–1615); and *Metaphysicae disputationes* (Madrid, 1617).

9. See Letter 17, note 3.

10. See Letter 21, note 7.

11. Leibniz posed his question in a letter dated 8 February 1708. Des Bosses had already supplied the relevant information in a letter dated 1 December 1706. See Letter 17, note 2.

12. For once Des Bosses’s intelligence seems to have failed him. According to Sommervogel, Liberius Gratianus was another pseudonym of Father Liéven de Meyere, who eventually published three works directed against the views of Anto-

nus Reginaldus, beginning with *Mente (de) S. Concilii Tridentini circa gratiam physice praedeterminantem Dissertatio I. Contra librum qui sub nomine Antonii Reginaldi nuper prodiit* (Antwerp, 1707). Sommervogel (1884, 582) identifies Reginaldus as Antoine Arnauld.

13. Salerno (1670–1729) served in a variety of positions, including director of studies at the German College in Rome. He was named a cardinal in 1719 (Sommervogel 1890, vol. 7, 462).

Letter 23

1. BN f.1. 10355, fols. 83–84: letter as sent; four quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 70: draft; one and three-quarter quarto sides in Leibniz's hand appended to Des Bosses's letter of 5 October 1708. Letter 23 answers Letter 22 and is answered by Des Bosses's letter of 28 November 1708. The sent version of this letter is undated. Gerhardt conjectures 2 October, a date that is impossible, as the draft of the letter was written on Des Bosses's letter of 5 October. The contents of Letter 23 place it between 5 October and 28 November, the date of Des Bosses's reply, and probably nearer the earlier date, as Des Bosses received it during his journey to Belgium and did not reply until he had returned to Hildesheim.

2. The draft reads: "is not one creature [*una creatura*]."

3. Pietro Sforza Pallavicino (1607–67), noted poet and dramatist and scion of an ancient noble line, renounced his patrimony to enter the priesthood. He joined the Society of Jesus in 1637, becoming professor of philosophy and later chair of theology at the Collegio Romano. His major works include the eight-volume *Asseriones theologicae* (Rome, 1649–52), based on his theology lectures; and an apologetic history of the Council of Trent (Rome, 1656–57). In 1657 he was named a cardinal by Pope Alexander VII. Leibniz's notes (ca. 1686–89) on another of Pallavicino's works, *Philosophiae moralis. P. I. Seu de bono libri quator* (Cologne, 1646), are published at A VI.iv: 1801–03.

4. Ignatius Der-Kennis (1598–1656) joined the Society of Jesus in 1614. He taught theology at Louvain and later headed the Jesuit colleges at Ypres and Louvain. He was a prolific author on theological subjects; Leibniz most likely refers to his *De Deo uno, trino, creatore* (Brussels, 1655). See Sommervogel 1890, vol. 2, 1940–44.

5. The final clause replaces the following text deleted in the draft: "with the result that the errors of many in this respect indeed consist more in words than in things [*et inde fit ut multorum errores hac quidem in parte magis in verbis quam in rebus consistent*]."

6. Francisco Lana-Terzi, S.J. (1631–87), published widely on topics in natural philosophy (Sommervogel 1890, vol. 4, 1441–45). It is not clear to which of his works Leibniz refers. Two letters to Leibniz are also preserved (Bodemann 1895, 127). Silvestro Mauro, S.J. (1619–87), was for many years chair of theology, and

later rector, at the Collegio Romano. His principal works include a six-volume commentary on Aristotle (Rome, 1668) and the three-volume *Opus theologicum* (Rome, 1687).

7. Leibniz refers to Spee's *Güldenenes Tugendbuch* (published posthumously in 1649). See Introduction, §4.

Letter 24

1. LBr 95, Bl. 73–74: letter as sent; two quarto sides in Des Bosses's hand. Letter 24 answers Leibniz's letter of 2 February 1709 and is answered by Letter 25.

2. Recalling Leibniz's promise in Letter 20 to send him a copy of his written comments on the views of Pierre Bayle, Des Bosses reported in a letter of 28 November 1708 the following incident that occurred during his travels in Belgium: "When, on the occasion of a discussion in Liège of the works of Bayle, I recounted your comments, in which you rebut the problems raised by him, Johannes Franciscus Bronkhart, a printer of that city, wished to offer you through me his labor and the fine press he owns for preparing your work. I am eager to know what you think about him, and whether I am going to see these comments sometime, which I urgently desire to do" (G.ii.365). In his letter of 2 February, Leibniz replied that he was receptive to Bronkhart's offer, on the condition that he guarantee Leibniz a minimum of 100 copies for his own use (G.ii.366). Discussion of the matter continued in the next several letters, with Des Bosses finally reporting in Letter 28 that Bronkhart had backed out of the arrangement.

3. See Letter 16.

4. Des Bosses inferred this commitment to the creation of souls on the "fourth or fifth day of creation" on the basis of Leibniz's expression of his position in "On Nature Itself," §6: "Certainly, if nothing had been impressed on creatures by the divine words, 'let the earth be fruitful and let the animals multiply' . . . it follows that either nothing now obeys that command or that the command held only at the time it was given and must always be renewed in the future" (G.iv.507/AG 158). Cf. Genesis 1: 22–23. Des Bosses expands on this point in Letter 28.

Letter 25

1. BN f.1. 10355, fol. 48: letter as sent; one quarto side in Leibniz's hand (our printed text). LBr 95, Bl. 74: partial draft; one-half quarto side in Leibniz's hand appended to Des Bosses's letter of 14 February 1709. Letter 25 answers Letter 24 and is answered by Letter 26.

Letter 26

1. LBr 95, Bl. 75–76: letter as sent; two quarto sides in Des Bosses's hand. Letter 26 answers Letter 25 and is answered by Letter 27.

2. See Letter 24, note 4.

3. Des Bosses refers to recent developments in the “Rites Controversy.” See Introduction, §4. Father Antonio Provana represented the Jesuit position to the pope, Clement XI, in the hope of winning his support. The papal legate Cardinal Charles-Thomas Maillard de Tournon arrived in China in 1705, and in 1707 published a decree that condemned the Chinese rites but exempted them from the charge of idolatry.

Letter 27

1. Halle UB Misc. 10, 2° Bl. 168–69: letter as sent; two and one-half quarto sides in Leibniz’s hand (our printed text). LBr 95, Bl. 77–78: draft, dated 24 April 1709; three quarto sides in Leibniz’s hand. LBr 95, Bl. 75–76: partial copy; two quarto sides, appended to Des Bosses’s letter of 22 April 1709. Letter 27 answers Letter 26 and is answered by Des Bosses’s letter of 18 May 1709 and by Letter 28.

2. Leibniz’s study was published for the first (and only) time in 1758. See Bodemann 1895, 21–22.

3. Friedrich Spanheim, *De papa foemina inter Leonem IV et Benedictum III disquisitio historica* (Leiden, 1691).

4. Compare Leibniz’s comments in the second paragraph of Letter 20.

5. Leibniz here begins a discussion of the origin of rational souls which he continues in Letters 29 and 31. Leibniz’s general account of the generation of organisms is a version of preformationism that assumes the preexistence of souls in the spermata (*semina*) of the male of the species. This view raises an obvious problem in the case of human beings. If all the spermata from which a human being can develop contain rational souls, then the vast majority of those souls are lost because they never unite with an ovum, a necessary condition for development. Leibniz considers several responses to this problem. There could be a new “absolute creation” of a rational soul on the occasion of any successful conception. Leibniz rejects this possibility on the grounds that it would require the destruction of a preexistent, nonrational soul followed by the creation of a rational soul in every respect identical with it, with the exception of its rationality. Also rejected is the doctrine of traduction, according to which souls are multiplied through a process analogous to the multiplication of points (as when, through the subdivision of an angle, the vertices of many angles are produced from a single vertex). As Leibniz indicates in the postscript added to the draft of this letter, this is a view to which he inclined in his youth, but which he rejected after coming to grips with the labyrinth of the continuum. In this letter, as elsewhere in his late writings, Leibniz gives serious consideration to the doctrine of transcreation, according to which a nonrational soul is transformed into a rational soul at conception, “through the miraculous addition of an essential degree of perfection.” In Letter 31, however, he indicates his preference for a more naturalistic explanation that draws on the resources of his doctrine of

preestablished harmony. According to this account, only those spermata that will develop into a human being are endowed with a rational soul, whose rationality remains latent until conception. The rest are endowed with only a sensitive soul, despite their human origin. For further discussion of these views, see *Theodicy*, §§86–91, 397.

Letter 28

1. LBr 95, Bl. 79–81: letter as sent; five and one-half quarto sides in Des Bosses's hand. Letter 28 answers Letter 27 and Leibniz's letter of 9 July 1709, and is answered by Letter 29.

2. In a letter dated 18 May 1709 (G.ii.372–73), Des Bosses deferred a response to Leibniz's elaboration in Letter 27 on the relation of matter and monads.

3. See Letter 17, note 6.

4. See Letter 18, note 3.

5. "Extrait d'une lettre de M. de Leibniz sur son Hypothèse de philosophie, et sur le problème curieux qu'un de ses amis propose aux mathématiciens; avec une remarque sur quelques points contestés dans les Journaux précédens, entre l'auteur des principes de Physique, et celui des objections contre ces principes," *Journal des savants*, 19 November 1696, 451–55 (G.iv.500–03).

6. See Letter 26, note 3.

7. Carlo Mauritius Vota (1629–1715), a Jesuit whose letters served Leibniz as a source of information about China. See Bodemann 1895, 366–69.

8. G.iv.507/AG 159.

9. Dionysius von Werl (1640–1709) was a member of the Friars Minor Capuchin, an austere branch of the Franciscan order engaged in missionary work and teaching. Leibniz had known Werl since the late 1670s, when the latter was part of the Capuchin mission at the court of Duke Johann Friedrich in Hanover and involved in discussions of the reunion of the Protestant and Roman Catholic churches. Werl later moved to Hildesheim, where he died on 4 March 1709.

10. See Introduction, §4.

Letter 29

1. BN f.1. 10355, fol. 8: letter as sent; two quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 84: copy; one and one-half quarto sides in Leibniz's hand. Letter 29 answers Letter 28 and is answered by Letter 30.

2. In the copy Leibniz wrote "different entelechies [*diversis Entelechiis*]."

3. See Letter 27, note 5.

4. See Letter 28, note 9. The letter to which Leibniz refers is not extant.

5. The postscript is missing in the copy.

6. Antonio Magliabechi (1633–1714), Florentine bibliophile and scholar,

served as librarian to Cosimo III, grand duke of Tuscany from 1673 to 1714. Leibniz met Magliabechi in 1689 during his journey through Italy, and the two thereafter carried on a long correspondence (Bodemann 1895, 161–64).

Letter 30

1. LBr 95, Bl. 95–96: letter as sent; four quarto sides in Des Bosses's hand. Letter 30 answers Letter 29 and Leibniz's letter of 12 August 1709, and is answered by Letter 31.

2. In his letter of 12 August, Leibniz forwarded to Des Bosses a short Latin essay on Chinese rites and religion (LBr 95, Bl. 91–92), which included a sympathetic discussion of the natural theology of the Chinese and an elaboration of the analogy between the characters of Fohi (i.e., the figures of the *Yi Jing*) and the system of binary numbers, which Leibniz interpreted as an image of creation *ex nihilo*. We do not reproduce the essay here. The Latin text is printed at G.ii.380–84. For a translation and commentary, see Cook and Rosemont 1994, 15–18, 67–74.

3. The context of Des Bosses's remarks is the ongoing struggle over the Rites Controversy, which threatened to jeopardize the Jesuit mission to China. The decree in question was delivered by the Chinese emperor Kang Xi in April 1707. The copy sent by Des Bosses is preserved as LBr 95, Bl. 100. The emperor had long been a supporter of the Jesuits' scientific and cultural activities in China, and in 1692 had issued an edict of toleration that accorded a legal status to Christianity and permitted freedom of worship. A further report sent to Rome in 1700 affirmed the emperor's view of the merely civil character of the rites (Lach and Van Kley 1993, 265, 269). By 1707, however, the situation had changed significantly. In his decree of that year, the emperor threatened with death those Europeans who, in "preaching the law," opposed Chinese teachings or did not respect Confucius.

4. *Le véritable esprit des nouveaux disciples de S. Augustin. Lettres d'un abbé licencié de Sorbonne à un vicaire général d'un diocèse des Pays-Bas* (1st ed. in 3 vols., Bruxelles, 1705; 2nd ed. in 4 vols., Liège, 1709). Des Bosses and Leibniz agreed that the anonymous volume was likely the work of Gabriel Daniel, S.J. (1649–1728), author of *Voyage du monde de Descartes* (Paris, 1690). In this they were mistaken: the author of the book was Jacques-Philippe Lallemant, S.J. (1660–1748). See Sommervogel 1884, 1022–23. Des Bosses had offered to lend Leibniz the book in June 1707 (G.ii.334), which he evidently did, as Leibniz apologized in December for failing to return it (G.ii.343) and finally reported having sent the book back in May 1708 (G.ii.349). Grua (255–57) prints the draft of a letter (in French) by Leibniz, addressed to the person who has lent him a book of letters "sur le véritable esprit des nouveaux disciples de S. Augustin." Grua speculates that the letter was intended for Des Bosses, although there is no record of communication between the two in any language except Latin. The document in question may record Leibniz's reflections on the book lent to him by Des Bosses; however, in the absence of further proof, we have not included it as part of the correspondence.

5. Des Bosses here recapitulates the argument offered by Leibniz in “On Nature Itself,” §13 (G.iv.512–14/AG 163–65).

6. Above this line of the letter, Leibniz added the words *non recte* (incorrectly).

7. Francois Bernier, *Abrégé de la philosophie de Mr. Gassendi* (Lyons, 1678; 2nd ed., Lyons, 1684). Pierre Gassendi (1592–1655), philosopher, theologian, and astronomer, best known for his efforts to formulate and defend a Christian version of Epicureanism.

8. Honoré Fabri, *Tractatus duo: quorum prior est de plantis, et de generatione animalium; posterior de homine* (Paris, 1666; Nuremburg, 1677). See Letter 2, note 3.

9. See *Theodicy*, “Preliminary Discourse,” §§18–19. The source of Des Bosses’s information on this point is unclear, since he does not seem to have received any part of the *Theodicy* until later in the month. See Letter 32, note 2.

Letter 31

1. BN f.1. 10355, fols. 20–21: letter as sent; three quarto sides in Leibniz’s hand (our printed text). LBr 95, Bl. 102–03: copy; three and three-quarter sides in secretary’s hand with additions by Leibniz. Letter 31 answers Letter 30 and is answered by Des Bosses’s letters of 20 September and 15 October 1709 and by Letter 32.

2. In his decree of April 1707, the emperor cited the seizure and killing of missionaries in Japan as a precedent for his actions.

3. See Letter 30, note 4.

4. An allusion to Virgil, *Aeneid* I.483–84. The same image is used by Des Bosses in Letter 18 in connection with the Jansenist movement.

5. It is possible, as Frémont (1981, 144) claims, that Leibniz is drawing here on the Latin summary of his *Theodicy*, the work known as *Causa Dei*. The first part of the passage paraphrases §§81–82 of that essay, and the final sentence is an exact quotation of §85. However, the additional close similarity between the passage and *Theodicy*, §397, suggests Leibniz may be relying on a preliminary study for that section in Latin, which also served as the basis for the related sections of *Causa Dei*.

6. See Letter 6, note 4.

7. See Letter 2, note 7.

8. This is Leibniz’s first attempt in the correspondence to explain transubstantiation within his system. He abandons the account in the face of Des Bosses’s decisive objection in Letter 32. In his reply, Leibniz adopts a completely different approach. See Introduction, §10.

Letter 32

1. LBr 95, Bl. 107–108, 110: letter as sent; six quarto sides in Des Bosses’s hand. Letter 32 answers Letter 31 and Leibniz’s letters of 27 September and 25 Oc-

tober 1709, and is answered by Letter 34. In a letter dated 15 October 1709, Des Bosses announced his impending move to the Jesuit college in Cologne, where he had been assigned to teach mathematics.

2. In his letter of 27 September, Leibniz forwarded to Des Bosses a portion of the *Theodicy* in page proofs, asking that it be returned to him as he had no other copy (G.ii.391–92). Remarks made by Des Bosses in the present letter indicate that the portion of the *Theodicy* he received included at least the “Preliminary Discourse on the Conformity of Faith with Reason.” Des Bosses complied with Leibniz’s request in his letter of 15 October, praising the part of the work he had seen but deferring further comment until his arrival in Cologne. He added that the one passage of which he could not approve was that in which “you heap praise on me.” Des Bosses is referring to “Preliminary Discourse,” §86.

3. *Dictionnaire universel françois et latin*, 3 vols., ed. Antoine Furetière (Trévoux, 1704).

4. Leibniz may have revised this sentence, but he did not adopt Des Bosses’s suggestion. The sentence in question appears in *Theodicy*, “Preliminary Discourse,” §9: “And in general, the deification of the mystics could receive this harmful interpretation. Gerson has already written opposing [*à déjà écrit contre*] Rusbrock, a mystical author, whose intention was apparently good, and whose expressions are excusable; but it is better to write in a manner that has no need of being excused.” Jean Gerson (1362–1429) was a theologian and chancellor of the University of Paris; Jan van Rusbrock (or Ruysbroeck) (1294–1381) was a Flemish mystical writer.

5. François Véron (1575–1640), popular French controversialist, author of *Méthode de traiter des controverses de religion par la seule Ecriture Sainte* (Amiens, 1615). Leibniz criticized his efforts at defending Roman Catholic doctrine in *Theodicy*, “Preliminary Discourse,” §62. On Bellarmine, see Letter 17, note 3.

6. The brothers Adrian (d. 1669) and Peter de Walemburg (d. 1675) were both auxiliary bishops of Cologne noted for their skill as defenders of Catholic theology against its Protestant critics.

7. See Letter 18, note 6.

8. Sextus Empiricus (ca. 200), responsible for the systematic presentation of ancient skepticism in his *Outlines of Pyrrhonism* and *Against the Mathematicians*. Thomas Hobbes (1588–1683), renowned English philosopher, author of *Leviathan* (1651).

9. Jean Daillé (1594–1670), French Calvinist, author of *Traité de l’employ des saints Pères pour le jugement des différends qui sont aujourd’hui en la religion* (1632). Georgius Calixtus, also known as Georg Callisen (1586–1656), Lutheran theologian and professor at the University of Helmstedt. As a leader of the Helmstedt syncretist school, Calixtus was an important precursor to Leibniz’s efforts on behalf of the reunion of the Protestant and Roman Catholic churches. Among his works are *Judicium Georgii Calixti . . . de controversiis theologicis, quae inter Lutheranos et Reformatos agitantur. Et de mutua partium fraternitate atque toler-*

antia, propter consensum in fundamentis (Frankfurt, 1650) and *De vera Christiana religione et ecclesia earundemque; statu discursus* (Helmstedt, 1687).

10. Barthold Nihus (1590–1657), Protestant convert to Catholicism who later entered the priesthood and rose to become suffragan bishop of Saxony and Thuringia, under the elector-bishop of Mainz, Johann Philipp von Schönborn. The works cited by Des Bosses grew out of the long debate between Nihus and his former Helmstedt teacher Calixtus (see previous note): *Ars nova, dicto S. Scripturae unico lucrandi e Pontificiis plurimos in partes Lutheranorum, detecta non nihil et suggesta Theologis Helmstetensibus, Georgio Calixto praesertim et Conrado Hornejo* (Hildesheim, 1633) and *Apologeticus pro arte nova contra Andabatam Helmstetensem* (Cologne, 1640).

11. Fortunio Liceti (1577–1657), Italian physician and natural philosopher. Des Bosses quotes from Liceti's book *De ortu animae humanae libri tres* (Genoa, 1602).

12. See *Theodicy*, "Preliminary Discourse," §18, where Leibniz distinguishes the latter as followers of Jan Zwingli rather than of John Calvin.

13. See the opening paragraph of Letter 30. The pamphlet is filed as LBr 95, Bl. 111–18.

14. Filed as LBr 95, Bl. 109.

15. St. Gobert (d. 1263), Belgian count, crusader, and monk.

16. Martin Polonus, or Martin of Troppau (d. 1278), Polish Dominican, sometime papal chaplain, later archbishop of Gnesen; compiler of a popular and largely fabular *Chronica pontificum et imperatorum* (Chronicle of Popes and Emperors). This work included, and was responsible for disseminating, the legend of the Popess Joan. Des Bosses may be referring to a later version of the chronicle, printed under the title *Martini Poloni Chronicon summorum pontificum et imperatorum* (Turin, 1477), which had no connection with Martin.

17. In his letter of 15 October 1709, Des Bosses had asked Leibniz for advice on recent books that would be useful to him in planning his mathematics course. Leibniz responded on 25 October, mentioning works by Lamy (see Letter 33, note 3), Pardies, and Dechales, and noting that he had known the latter two fairly well in Paris. Ignace-Gaston Pardies (1636–73) was a Jesuit mathematician and instrument maker. His published criticisms of Newton's theory of refraction earned a respectful reply from Newton. Among his works are *Dissertatio de motu et natura cometarum* (Bourdeaux, 1665), *La statique* (Paris, 1673), and *Elémens de géométrie* (Paris, 1671), which was translated into Latin and English. Claude-François Milliet Dechales, S.J. (1621–78), later professor of mathematics at Turin, is best known for his *Cursus seu mundus mathematicus*, 3 vols. (Lyons, 1674); and *Les élémens d'Euclide, expliquez d'une manière nouvelle et très-facile* (Paris, 1683).

18. Gilles-François Gottignies, S.J. (1630–89), student of Grégoire de Saint-Vincent, professor of mathematics at the Collegio Romano. His "logistic" method was conceived as a rival to Descartes's algebraic geometry. His works include *Logistica, sive, Scientia: circa quamlibet quantitatem demonstrative discurrens cui mathematicum* (Rome, 1675).

19. Grégoire de Saint-Vincent, S.J. (1584–1667), noted for his efforts to square the circle, was an original mathematician whose work on indivisibles contributed to the development of the calculus. His major publication is *Opus geometricum quadraturae circuli et sectionum con*i (Antwerp, 1647). Des Bosses here refers to his *Problema Austriacum super data recta linea, quatuor decangulum, aequiangulum et aequilaterum constituere* (Munich, 1653).

20. Jacques Ozanam (1640–1717), French mathematician. Among his many works are *Nouveaux éléments d'Algèbre* (Amsterdam, 1702) and the manuscript “Les six livres de l'arithmétique de Diophante augmentés et réduits à la spécieuse,” which was admired by Leibniz.

21. See Letter 18, note 8.

22. Guillaume François Antoine l'Hospital (1661–1704) was among the earliest pupils of Johann Bernoulli, who introduced him to the calculus in 1691. L'Hospital went on to write the first textbook on the subject, *Analyse des infiniment petits* (Paris, 1696), which established the usage of the differential notation throughout continental Europe. He carried on an extensive correspondence with Leibniz between 1692 and 1701 (Bodemann 1895, 147).

Letter 33

1. LBr 95, Bl. 123: letter as sent; one quarto side in Des Bosses's hand. Letter 33 follows a letter from Des Bosses to Leibniz dated 15 March 1710. It is answered by Leibniz in Letters 34 and 38.

2. Included with Des Bosses's letter was a prospectus for a volume entitled *Musaeum Kircherianum, sive Musaeum a P. Athanasio Kircherio in Collegio Romano Societatis Iesu iam pridem incoeptum, nuper restitutum, auctum, descriptum, et iconibus illustratum* (Rome, 1709), edited by Philippe Bonann, S.J., which collected the researches of the Jesuit polymath Athanasius Kircher. It is preserved as LBr 95, Bl. 3–4. The letter apparently included other documents relating to the Chinese affair, but these have not been identified. Philippe Bonann (1638–1725) was an Italian doctor and naturalist and director of the Museum Kircherianum in Rome. Athanasius Kircher (1601–80) had wide-ranging intellectual interests, publishing important works in natural philosophy, music, and philology, including one of the first attempts to decipher Egyptian hieroglyphics.

3. The Benedictine is the French mathematician, philosopher, and theologian François Lamy (1636–1711), whose criticisms of the system of preestablished harmony were published in his *De la connoissance de soi-mesme* (Paris, 1694–98; 2nd ed. 1699). Leibniz replied to them in “Réponse de M. Leibnitz aux objections que l'auteur du livre de la Connaissance de soi-même, a faites contre le système de l'harmonie préétablie,” *Supplément du Journal des savants du dernier de juin 1709*, 275–81 (Ravier 1937, 81). Leibniz's reply is reprinted in G.iv.577–90. For translations of the relevant texts and a full discussion of the exchange, see Woolhouse and Francks 1997, 133–70.

Letter 34

1. BN f.1. 10355, fols. 36–37: letter as sent; four quarto sides in Leibniz's hand. LBr 95, Bl. 119–20: draft; three octavo sides in Leibniz's hand. Letter 34 answers Letters 32 and 33, and a further letter from Des Bosses dated 15 March 1710. It is answered by Letter 35. Gerhardt identified the draft of this letter as an earlier response, composed sometime in January, to Letter 32 (see G.ii.398–400). In addition to the overlap in contents and wording between the two documents, Des Bosses's reply (Letter 35) makes it clear that he had received no earlier response to his letter of 18 January 1710. Given Leibniz's uncertainty about the matter (see the second paragraph of this letter), it seems most likely that Leibniz drafted a reply at the time he received Des Bosses's January letter and then set it aside, only to pick it up again four months later. Because the differences between the draft and sent versions of the letter are more extensive than can be conveniently indicated in notes, we have printed both documents.

2. Since the beginning of the year, Leibniz had made visits of several weeks each to Brunswick and Wolfenbüttel (Müller and Krönert 1969, 216).

3. See Letter 32, note 5.

4. Pierre Nicole, *De l'unité de l'Eglise* (1687). See Letter 18, note 6.

5. Charles-Thomas Maillard de Tournon, *Mémoires pour Rome sur l'état de la religion chrétienne dans la Chine* (n.p., n.d). An English translation of the work was published in London in 1710.

6. In 1704 Clement XI issued a decree condemning the Chinese rites and criticizing the conduct of the Jesuits. In 1707 this decree was promulgated in China by the papal legate Tournon (see Letter 26, note 3). As Leibniz explains in the draft of this letter, Tournon's action appeared puzzling to those who believed that the pope's decree was largely a formal gesture, intended to preserve the role of the Jesuits in China.

7. See Letter 32, note 11.

8. Jacques Hyacinthe Serry (1659–1738), *Historia Congregationum de Auxiliis divinae gratiae sub summis Pontificibus Clemente VIII et Paulo V, in quatuor libros distributa, et sub ascititio nomine Augustini Le Blanc, Lovanii primum publicata* (Louvain, 1700). Serry's book prompted in reply the work by Liéven de Meyere, S.J., cited in Letter 17, note 2.

9. See Letter 32, note 17.

10. See Letter 32, note 18.

11. See Letter 32, note 19.

12. Claude de Visdelou, S.J. (1656–1737), one of the missionaries sent to China by Louis XIV in 1687. As Leibniz indicates, he was the only Jesuit who supported the ban on Chinese rites decreed by the papal legate Tournon. Thereafter Tournon appointed him vicar apostolic of Kwei-chou with the title of bishop of Claudiopopolis. With the other missionaries who had submitted to the decree, Visdelou followed the legate to Macao, where he was secretly consecrated bishop on 2 February 1709. He then set out for Pondicherry, where he remained in retirement in the

house of the French Capuchins until his death. Visdelou took with him more than 500 volumes in Chinese, whose study became his chief occupation. His research was published after his death as a supplement to Barthélemy d'Herbolet's *Bibliothèque orientale: Bibliothèque orientale, ou Dictionnaire universel: contenant généralement tout ce qui regarde la connoissance des peuples de l'Orient. Leurs histoires et traditions véritables* (Maestricht, 1776). See *The Catholic Encyclopedia*, vol. 15, art. "Claude de Visdelou."

13. See Letter 33, note 2. "Equivocal generation" is another term for spontaneous generation.

14. See Letter 33, note 3.

15. Nicolas Förster was a Hanover bookseller and publisher patronized by Leibniz. For their correspondence, see Bodemann 1895, 60. In his letter of 15 March, Des Bosses reported that Nöthen denied having received a copy of Leibniz's *Scriptores rerum Brunsvicensium* (see Letter 20, note 10) from Förster. Evidently Leibniz forwarded to Des Bosses proof that it had been sent.

16. See Letter 5, note 2.

17. See Letter 32, note 4.

18. See Letter 32, note 6.

19. See Letter 6, note 4.

20. A crucial point that does not appear in the sent version of the letter. As a Lutheran, Leibniz was not obliged to defend transubstantiation as a dogma of faith. At most, therefore, he attempts to show how such a doctrine *could* be defended given the principles of his philosophy. See Introduction, §§9–10.

21. Jean de Launoy (1603–78), French Catholic theologian; author of *De vera notione plenatii apud Augustinum concilii in causa rebaptizantium dissertatio* (Paris, 1644). See note 8.

22. See Letter 32, note 16.

23. See Letter 32, note 20.

Letter 35

1. LBr 95, Bl. 125–126: letter as sent; three quarto sides in Des Bosses's hand. Letter 35 answers Letter 34 and is answered by Letter 36.

2. Des Bosses refers to the Jesuit Fathers Ramón Arxo (from Portugal and hence "Lusitanus") and Antonio Provana, who served as emissaries between the emperor of China and the pope.

3. See Letter 34, note 12.

4. Charles Maigrot, S.J. (1652–1730), held various administrative positions in the missions in China. In a decree from 1693, he forbade missionaries from using the words *Tien* (heaven) and *Shang-ti* (highest emperor) as names for the Christian God. He sided with Tournon regarding the gulf between Confucianism and Christianity and was expelled from China in 1706.

5. I Kings 3:26, though the Vulgate has *filio* instead of *puero*.

6. Gabriel Daniel (see Letter 30, note 4).

7. See Letter 7, note 2.
8. The summer residence of the pope.
9. Part of the Roman curia.

Letter 36

1. BN f.1. 10355, fol. 56: letter as sent; two quarto sides in Leibniz's hand (our printed text). LBr 95 Bl. 126: copy; one quarto side in Leibniz's hand, appended to Des Bosses's letter of 14 June 1708. Letter 36 answers Letter 35 and is answered by Letter 37.

2. In his copy Leibniz wrote: "for I would not wish the progress of Christianity to be stopped [*nollem enim Christianismi progressum sisti*]. . . ."

3. Athanasius Kircher, *China monumentis . . . illustrata* (Amsterdam, 1667). See Letter 33, note 2.

4. Denis Petau, S.J. (1583–1652), author of *Theologica dogmata*, 4 vols. (Paris, 1644–50).

5. Louis de Thomassin (1619–95), like Malebranche a member of the Oratory, wrote *Vetus et nova ecclesiae disciplina circa beneficia et beneficiarios* (Leiden, 1705). Leibniz mentions Petau and Thomassin earlier in his career in connection with his plan to create an encyclopedia of human knowledge. See A VI.iv: 257.

6. In his copy, Leibniz added that thus far the history has been taken almost through the Church Fathers. The "certain learned man" of whom he speaks is apparently himself. The plan for the encyclopedia cited in the previous note consists of lists of authors whose views on a variety of subjects (theology, jurisprudence, history, philosophy) would be summarized and reconciled in the encyclopedia. Corresponding to what he calls the "history of dogmas," Leibniz includes as subtopics "positive theology," "scriptural theology," "notable and difficult passages of scripture," "Patristic theology or the history of the Church," and "controversial theology." The hypothesis that Leibniz is referring to his own plan is confirmed in Letter 37, where Des Bosses recalls having shown a copy of "your plan [*consilium tuum*]" to Tolomei. For an overview of the encyclopedia project, see Couturat 1901, chap. 5.

7. As evidenced by the copy, Leibniz means that there are *histories* of ancient philosophy but almost none of later philosophy: "Habemus aliquam antiquae philosophiae Historiam, sed mediae fere nullam."

Letter 37

1. LBr 95, Bl. 127: letter as sent; two quarto sides in Des Bosses's hand. Letter 37 answers Letter 36 and is answered by Letter 38.

2. See Letter 36, note 6.
3. See Letter 30, note 2.
4. Filed as LBr 95, Bl. 128.
5. A region of Belgium. François Noël, S.J. (1651–1729), first arrived in China

in 1687. He was noted as an astronomer and translator of Confucian classics. See Letter 39, note 4; and Letter 45, note 3.

Letter 38

1. BN f.1. 10355, fols. 59–60: letter as sent; three quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 127–28: copy; one-third quarto side in Leibniz's hand, appended to Des Bosses's letter of 18 July 1710. Letter 38 answers Letter 37 and is answered by Letter 39.

2. See Letter 33.

3. In the copy, Leibniz wrote “cannot be comprehended [*comprehendi nequeant*] by a finite mind.”

4. Joachim Bouvet, S.J. (1656–1730), was one of the five “mathematicians of the king” sent by Louis XIV to China to demonstrate European mathematics and natural philosophy to the emperor. Leibniz's last letter to Bouvet, to which he here refers, was dated 13 December 1707. See Widmaier 1990, 265–67.

5. Antoine Verjus, S.J. (1632–1706), procurator of the Jesuit missions to India and China. For Leibniz's correspondence with Verjus, see Bodemann 1895, 355–61; and Widmaier 1990.

Letter 39

1. LBr 95, Bl. 130–31: letter as sent; two quarto sides in Des Bosses's hand. As Robinet 1969 has argued, the letter printed at G.ii.410 and dated by Des Bosses 10 October 1710 must actually be from 10 October 1712. Letter 39 answers Letter 38 and is answered by Letter 40.

2. Theodore Eleutherius, pseudonym of Liévin de Meyer, S.J. See Letter 17, note 2.

3. This is most likely Hartsoeker's letter of 22 August 1710; see G.iii.501–04.

4. See Letter 35. Noël published several separate works in 1711 relating to China: *Sinensis imperii libri classici sex . . .*, *Philosophia Sinice tribus tractatibus . . .*, *Doctrinae Sinicae brevis indigatio ex ipsis Sinarum libris eruta . . .*, and *Historica notitia rituum ac ceremoniarum Sinicarum in colendis parentibus ac benefactoribus defunctis . . .*

5. Presumably what Des Bosses means is that he has found a reliable method of sending mail from Cologne to Trévoux. Earlier remarks by both correspondents indicate that the reliability of mail delivery was a constant problem.

Letter 40

1. The MS of the sent version of Letter 40 is no longer extant; we follow the text of G. LBr 95, Bl. 131: copy; one quarto side in Leibniz's hand. Letter 40 answers Letter 39 and is answered by Letter 41.

2. From Leibniz's point of view, the exchange probably began with Hartsoeker's letter of 8 July 1710 (G.iii.498–99). Leibniz responded to this letter on 9 August (G.iii.500–01) and was answered on 22 August (G.iii.501–04). Much of what Leibniz says in this paragraph echoes the argument from his letter to Hartsoeker of 30 October (G.iii.504–10), which he conveyed to Des Bosses with Letter 40.

3. Nicolas Hartsoeker, *Eclaircissemens sur les conjectures physiques* (Amsterdam, 1710).

4. Horace, *Ars poetica* 22. An instance of Leibnizian humor. In Horace's work, the potter envisages a large amphora and produces only a little pitcher; here Leibniz claims to have envisaged a little pitcher and produced a large amphora.

5. Leibniz's *Theodicy* was published in Amsterdam by Isaac Troyel in 1710. At the time it was common for the same individual to be both a publisher and the owner of a bookstore.

Letter 41

1. LBr 95, Bl. 132–34: letter as sent; five quarto sides in Des Bosses's hand. Letter 41 answers Letter 40 and Leibniz's letter of 18 November 1710, and is answered by Letter 42.

2. Orban and Hartsoeker, respectively. See Letter 40.

3. François Lamy, *Lettres philosophiques sur divers sujets importants* (Trévoux, 1703). On Lamy, see Letter 33, note 3. Leibniz had expressed a wish to see the book in *Theodicy*, §392.

4. As Leibniz's reply in Letter 42 indicates, Letter 41 contained a transcription of the sixth of Lamy's *lettres philosophiques*, along with the titles of the remaining letters. With his reply, Leibniz included a letter to Tournemine, published in the *Mémoires de Trévoux* of July 1712, in which he commented on Lamy's purported demonstration that "God is the unique true cause of all that is real." The manuscript (with additions in Leibniz's hand) is preserved as BN MS f.1. 10355, fols. 67–68. It is printed by Gerhardt as a note to *Theodicy*, §392 (G.vi.347–50/H 389–92).

5. Des Bosses refers to the *Bibliotheca scriptorum Societatis Jesu* (Rome, 1676), begun by Pedro de Ribadeneyra, S.J. (1527–1611), and Philippe Alegambe, S.J. (1592–1652), and continued by Nathaniel Southwell, S.J. (1593–1660).

6. See *Theodicy*, §§96–97; and Introduction, §4. Spee was born in Kaiserswerth, on the Rhine River, not in the Channel Islands.

7. Michel Baius (or Michel de Bay) (1513–89) was a controversial theologian whose views on grace, free will, and original sin were endorsed by Jansen and his followers. In a papal bull (*Ex omnibus afflictionibus*) of 1567, Pius V denounced many propositions from Baius's works; according to the pope, they ranged from "heretical" through "erroneous" to merely "offensive to pious ears." (To this day, there is no agreement on whether the number of propositions set out in the bull was 76 or 79.) Des Bosses quotes from the papal bull. See Denzinger 1991, 591.

8. See Paul Pellisson-Fontanier, *De la tolérance des religions*. *Lettres de M. de*

Leibniz et réponses de M. Pellisson (Paris, 1692), 18–22. On Pellisson, see Letter 7, note 2.

9. Suárez 1856–78, vol. 7, 81. The context of the quoted passage is a discussion of Aquinas's views on grace and predestination.

10. In the first quotation Des Bosses translates into Latin an objection that Leibniz makes against the Molinists in *Theodicy*, §48 (G.vi.129). The second quotation is a fuller statement of the same objection in its original French.

11. See G.iii.510–16.

Letter 42

1. BN MS f.1. 10355, fols. 109–10: letter as sent; four quarto sides in secretary's hand, with additions by Leibniz (our printed text). LBr 95, Bl. 229: draft; two folio sides in Leibniz's hand. Letter 42 answers Letter 41 and is answered by Letter 43.

2. To Orban and Hartsoeker. See Letter 41.

3. That is, *Essays on Theodicy*.

4. On Leibniz's reply to Tournemine, see Letter 41, note 4; for his reply to Hartsoeker, see G.iii.516–21.

5. See Letter 2, note 5.

6. See Letter 41, note 6.

7. As Adams notes, "In the Roman Catholic Church propositions could be officially censured as 'bad sounding [*male sonans*],' which is weaker than condemning them as 'false'" (1994, 53, n. 85). Adams interprets Leibniz's statement as consistent with the general "lack of candor" he displays in the *Theodicy*. Whether or not one accepts this judgment, Leibniz's desire to reconcile his views with Catholic orthodoxy (particularly as interpreted by the Jesuits) is evident. See Introduction, §§2–5.

Letter 43

1. LBr 95, Bl. 135–36: letter as sent; three quarto sides in Des Bosses's hand. Letter 43 answers Letter 42 and Leibniz's letter of 2 March 1711, and is answered by Letter 44.

2. See G.iii.522–27.

3. At this time Des Bosses's letters to Leibniz passed via the Jesuit fathers in Hildesheim.

4. Caspar Castner, S.J. (1655–1709), was a missionary to China who traveled and worked with Father François Noël. In addition to his reports on China, Castner produced studies on navigation, geography, and mathematics.

5. Duke Anton Ulrich, who had recently converted to Roman Catholicism (see Letter 16, note 7).

6. Here and below references in the letter are to the first edition of Leibniz's

Theodicy. See G.vi.379–80. Des Bosses quotes Leibniz freely, though not unfairly. The first three clauses do indeed constitute the first prosyllogism to the third objection in the abstract of the argument of the *Theodicy*; however, what follows (“on répond si . . .”) could be misleading. Following the first and second prosyllogisms, Leibniz has a “Reponse,” in which he says: “Car si quelcun entendoit une autre nécessité ou impossibilité (c’est à dire une nécessité qui ne fût que morale, ou qui ne fût qu’hypothétique qu’on expliquera tantôt), il est manifeste qu’on luy nieroit la majeure de l’objection même.” That is, “For if someone understood another necessity or impossibility (that is, a necessity that was only moral or that was only hypothetical, which we shall explain later), it is clear that he would deny the major premise of the objection itself.”

7. See G.vi.284.

8. *Theodicy*, §309 (G.vi.299). “Necessitates” is in a passage quoted by Leibniz from Bayle; the parenthetical remark is by Leibniz himself and is used by Des Bosses to show that Leibniz ascribes a moral necessity to Adam’s act of sinning.

9. See Letter 22, note 8.

10. *Theodicy*, “Preliminary Discourse,” §55 (G.vi.81).

11. Nestorianism was a view condemned as heretical in 431, according to which the divine and human persons are separate in the incarnate Christ. Des Bosses’s point is that, in this passage from the *Theodicy*, in which the union of the Word of God and human nature is compared with the union of soul and body, Leibniz leaves himself open to charges of heresy, presumably because the soul and body are separate.

12. Jeremias Drechsel (or Drexelius), S.J. (1581–1638), was an ascetic writer whose works enjoyed a fair degree of popularity. Des Bosses refers to the passage in *Theodicy*, §267 (G.vi.276), where Leibniz quotes Drexel’s *Nicetas seu triumphata incontinentis* (Munich, 1624) and *De aeternitate considerationes utilissimae* (Munich, 1620).

Letter 44

1. BN MS f.1. 10355, fols. 77–78: letter as sent; four octavo sides in Leibniz’s hand (our printed text). LBr 95, Bl. 136: copy; one and one-half quarto sides in secretary’s hand appended to Des Bosses’s letter of 25 April 1711. Letter 44 answers Letter 43 and is answered by Letter 45.

2. Leibniz spent much of the spring in Berlin, not returning to Hanover until mid-June. See Müller and Krönert 1969.

3. Rudolph Christian von Imhof (1660–1717), baron and privy councilor in the court of Brunswick-Wolfenbüttel, exchanged more than fifty letters with Leibniz between 1701 and 1715. See Bodemann 1895, 104–06.

4. See Grua 223 and Introduction, §4.

5. See Letter 38.

6. See G.iii.527–28.

Letter 45

1. LBr 95, Bl. 230–31: letter as sent; two quarto sides in Des Bosses's hand. Letter 45 answers Letter 44 and is answered by Letter 46.

2. Marquard Ludwig Freiherr von Printz (1675–1725), Prussian diplomat, court chamberlain, and chief administrator of education under Frederick I and Frederick William I.

3. The actual title of the book, a compendium of scientific investigations carried out by various Jesuit missions, is *Observationes mathematicae et physicae factae in India et China a Patre Francisco Noël ab anno 1684 ad annum 1708*.

Letter 46

1. BN MS f.1. 10355, fol. 28: letter as sent; two octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 230: partial copy; one-third quarto side in Leibniz's hand, appended to Des Bosses's letter of 18 August 1711. Letter 46 answers Letter 45 and is answered by Des Bosses's letter of 6 October 1711.

2. A subtle hint that Des Bosses takes. In Letter 47, he announces that he has undertaken the project, which culminates in the publication of the *Tentamina Theodicaeae* in 1719.

Letter 47

1. LBr 95, B1.140–41: letter as sent; four quarto sides in Des Bosses's hand. Letter 47 follows three letters dealing with the translation of the *Theodicy*, Leibniz's correspondence with Hartsoecker, and the Jansenist controversy. It is answered by Letter 48.

2. The bishop of Meaux is Bossuet (see Letter 8, note 2). While the particular book cannot be identified with certainty, given that subsequent letters suggest that it deals with the rejection of Jansenism, it is likely Bossuet's *Censura et declaratio conventus generalis cleri gallicani congregati in palatio regio San-Germano . . . in materia fidei & morum* . . . (Paris, 1700).

3. See G.iii.530–32.

4. *Theodicy*, "Preliminary Discourse," §19 (G.vi.61–62).

5. Leibniz's essay on planetary motion, "Tentamen de motuum coelestium causis," was published in the *Acta eruditorum* in February 1689 (GM.vi.144–87). For a discussion of its contents and Leibniz's criticisms of Newtonian theory, see Bertoloni Meli 1993.

6. As Leibniz's reply indicates, Letter 47 brought with it the first installment of Des Bosses's translation of the *Theodicy*.

7. This work is not extant.

8. Three letters were published in the *Mémoires de Trévoux* in 1712, all from the previous year: viz., letters XI–XII in G.iii.516–28.

9. There is some confusion here, for the review of the *Theodicy* did not appear until July 1713 (article CI, pp. 1178–99); see Frémont 1999, 236.

10. *Causa Dei asserta per Justitiam ejus, cum caeteris ejus perfectionibus, cunctisque actionibus conciliatam* was published as a separate work by Isaac Troyel in 1710.

11. The Latin version of the *Theodicy* was published in 1719 in Frankfurt by C. J. Bencard under the title, suggested by Leibniz in the next letter, *Tentamina Theodicaeae de bonitate Dei libertate hominis et origine mali*, a literal translation of the French title.

12. Ferdinand von Fürstenberg (1626–83) was prince-bishop of Paderborn and Münster and successor to Bernhard (see note 13).

13. Nicolaus Schatten, S.J. (1608–76), was a historian who worked first for Prince-Bishop Bernhard von Golen in Münster and then for Ferdinand; he died before the publication of his *Historia Westphalia*. Cloppenburg was appointed to finish the work.

14. Johann von Alpen (original name probably Johann Wolfgang Ripp) (1630–98) was a priest and advisor to Bernhard and the author of *De vita et rebus gestis Christophori Bernardi, Episcopi et Principis Monasteriensis Decas . . .*, Parts I (Coesfeld, 1694) and II (Münster, 1703).

15. Wyer Wilhelm [or Willem] Muys (1682–1744) was professor of mathematics, medicine, chemistry, and botany in Franeker. The full title of the work to which Des Bosses refers is *Elementa physices methodo mathematica demonstrata, quibus accedunt dissertationes duae de causa soliditatis corporum et de causa resistentiae fluidorum* (Amsterdam, 1711). See Bodemann 1895, 202; and Jöcher 1751, vol. 3, 786.

16. A reference to Leibniz's "On Nature Itself" (see Letter 1, note 12).

17. Conrad Vorstius (1569–1622) was a Reformed theologian and author of *Tractatus theologicus de Deo, sive de natura et attributis Dei* (Steinfurt, 1610). Whereas Leibniz dismisses him as a "semi-Socinian" (*Causa Dei*, §3; G.vi.439), Bayle devotes an entire article to him in his *Dictionnaire historique et critique*.

Letter 48

1. BN f.1. 10355, fols. 111–16: letter as sent; twelve quarto sides in secretary's hand with additions by Leibniz (our printed text). LBr 95, B1.146–47: fair copy, dated 5 February 1712; four folio sides in secretary's hand with extensive additions by Leibniz. LBr 95, Bl. 148–49: draft, dated 5 February 1712; four quarto sides in Leibniz's hand. LBr 95, Bl. 150–51: supplementary study; four octavo sides in Leibniz's hand. Letter 48 answers Letter 47 and is answered by Des Bosses's letter of 30 March 1712 and by Letter 49. The draft of the letter bears the date 5 February 1712. The copy received by Des Bosses is dated 15 February. At the top of the draft, whose margins are filled with additions to the body of the letter, Leibniz wrote: "I beg your pardon again and again that this letter is so disorderly and so badly writ-

ten, on account of additional thoughts. At the moment, though, it is not possible to transcribe it again.” As it turns out, Leibniz did have a copy made, which bears the same date as the draft. This copy incorporates most of the additions to the original text; those missing were probably illegible to the copyist and were transferred by Leibniz himself. At the same time, Leibniz decided to make further additions to the letter. Subsequently a second copy (in the same secretary’s hand) was made, which bears the date 15 February.

2. In the draft Leibniz had originally used the verb “result [*resultare*],” which he then crossed out and replaced with “arise [*oriri*].”

3. See Letter 2, note 5.

4. In the draft Leibniz wrote “an accidental union [*unio accidentalis*] of them.”

5. Diego Ruiz de Montoya, S.J. (1562–1632), professor of theology at Granada, Cordova, and Seville, and author of several commentaries on the works of Thomas Aquinas. Although there was a Jesuit theologian named Martin Perez who wrote on the topic (Knebel 1993, 202), Leibniz may have meant Antonio Perez (Letter 19, note 5). See the following note.

6. With Letter 47 Des Bosses had included excerpts from works by the Jesuit theologians Antonio Perez and Silvestro Mauro (Letter 23, note 6) on the moral necessity of God’s choice of the best. The work by Perez included a summary of the position of Ruiz on the topic. The excerpts are filed as LBr 95, Bl. 142–45.

7. Bossuet.

8. Cf. *Theodicy*, §285.

9. Leibniz refers to his (unfinished) history of the house of Brunswick, *Annales imperii occidentis brunsvicensis*, covering the period 768–1005. The history remained unpublished until the mid-nineteenth century. On the myth of the popess, see Letter 27.

10. Gabriel Daniel (see Letter 30, note 6) was decidedly more successful than Leibniz in his historiographical endeavors. Appointed historiographer of France by Louis XIV, he published his seventeen-volume *Histoire de France* in 1713.

11. William Gilbert (1544–1603), English physician and author of the influential treatise *De magnete* (London, 1600). Nicolas Cabej, S.J. (1586–1650), author of *Philosophia magnetica* (Cologne, 1629). Athanasius Kircher (see Letter 33, note 2), author of *Magnes sive de arte magnetica* (Rome, 1640; Cologne, 1643, 1654). Vincent Léotaud, S.J. (1596–1672), author of *Magnetologia* (Lyons, 1668).

12. It is impossible to tell whether this study, written in Leibniz’s hand on two smaller sheets of paper, is a direct response to Letter 47. Its contents are closely related to issues raised in this and subsequent letters.

13. For other uses of this expression, see *Causa Dei*, §§14, 16 (G.vi.440–41); and “Necessary and Contingent Truths” (A VI.iv: 1515, 1522/PW 96, 103).

14. Leibniz originally wrote and then crossed out “but he also sees one thing arising from them. And in this phenomenon of one thing consists the nature [substance] of a composite body [*sed etiam videt unum ex iis natum. Et in hoc phaenomeno unius consistit corporis compositi substantia natura*].” In the manuscript Leibniz appears to have crossed out *substantia* before deleting the entire sentence.

15. Leibniz originally wrote and then crossed out “locality, that is, situation, or the order of coexistence, duration, that is, the order of changes [*localitas seu situs, sive ordo coexistendi, duratio seu ordo mutationum*].”

16. Leibniz returns here to a type of ontological-linguistic analysis that he pursued with vigor during the 1680s. For related remarks, see the supplementary study to Letter 57 and *New Essays* II.xxii–xxiii (NE 212–18); for a general survey of the project, see Rutherford 1995, chap. 5.

Letter 49

1. LBr 95, Bl. 158, 163: letter as sent; three and one-half quarto sides in Des Bosses’s hand. Letter 49 answers Letter 48 and is answered by Letter 50. Three short letters exchanged by the correspondents between Letters 48 and 49 concern the translation of the *Theodicy*, the purchase of books, and the state of the Chinese mission.

2. Malebranche’s view is most clearly expressed in the Sixth *Eclaircissement* to the *Search after Truth* (OCM.iii.53–69).

3. Quoted (with several words omitted) from Letter 48.

4. Bossuet (see Letter 47).

5. The authors were Jean-François de Lescure de Valdéril and Etienne de Champflour; the work, *Ordonnance et instruction pastorale de Messieurs les évêques de Luçon et de La Rochelle au clergé et au peuple de leurs diocèses, portant condamnation d’un livre intitulé: “Le Nouveau Testamen en françois, avec des Réflexions morales sur chaque verset [by Quesnel], où l’on montre la conformité de la doctrine de l’auteur des Réflexions, avec la doctrine des cinq propositions et du livre de Jansenius . . .”* (La Rochelle, 1710)

6. The proposition, which the Church authorities claimed to find in Jansen’s *Augustinus*, stated that it was an error to hold that Christ died for everyone without exception. See Introduction, §5.

7. In this case, someone with a master’s degree; a *licentiatus* was the academic degree between a baccalaureate and a doctoral degree.

8. Page 540 of the first edition of the *Theodicy* corresponds to G.vi.321 (§§348–49).

9. See G.iii.532–25.

Letter 50

1. BN f.1. 10355, fols. 24–25: letter as sent; two and one-half quarto sides in Leibniz’s hand (our printed text). LBr 95. Bl. 164–65: copy; two and one-half quarto sides in secretary’s hand with additions by Leibniz. Letter 50 answers Letter 49 and is answered by Letter 51.

2. In fact there were to be no more direct letters between Leibniz and Hartsoeker, though Des Bosses would continue to serve as a proxy, asking Hartsoeker Leibniz’s questions. See Letters 65 and 66.

3. It is uncertain to which texts Leibniz refers. Candidates include an untitled 1702 critique of the Cartesian conception of body and force (G.iv.393–400/AG 250–56) and the essay “Antibarbarus physicus pro philosophia reali contra renovationes qualitatum scholasticarum et intelligentiarum chimaericarum” (A Physicist against Barbarism, in Defense of Real Philosophy and against Revivals of Scholastic Qualities and Chimerical Intelligences) (G.vii.337–44/AG 312–20).

4. The Portuguese missionaries sought the right to appoint their own bishops.

5. The list of books is lost. Henry Rommerskirchen was a Cologne bookseller (see Letter 47).

Letter 51

1. LBr 95, Bl. 166, 166a, 168, 169: letter as sent; five and one-half quarto sides in Des Bosses’s hand. Letter 51 answers Letter 50 and is answered by Letter 52.

2. Tolomei was made a cardinal on 17 May 1712 by Pope Clement XI. He became the chief adviser to the pope on theological matters and played an important role in the preparation of the condemnation of Quesnel found in the bull *Unigenitus Dei Filius* of 1713.

3. Letter 50.

4. On “dimensional quantity” (also translated “dimensive quantity”), see Aquinas, *Summa theologia* III, q. 76, arts. 4 ff.

5. Abu Al-Waleed Muhammad Ibn Ahmad Ibn Rushd (known in the West as Averroës) (1126?–1198) was the most influential Arabic philosopher of the Middle Ages; the view referred to can be found in *Commentarium magnum in Aristotelis De anima libros* (Averroës 1953, 75 ff.). Jacopo (or Giacomo) Zabarella (1533–89) was an important late Scholastic philosopher and logician; see *Commentarii in III. Aristotelis libros De anima* in Zabarella 1606–07, cols. 601–02.

6. Here and in the paragraphs that follow, Des Bosses appeals to a Peripatetic distinction, arguing that a monad is a “metaphysical substance,” or a substance with respect to its “essence or metaphysical actuality,” but not a “physical substance,” or a substance with respect to its “existence or physical actuality.” The latter is an extended, corporeal substance whose unity and activity are ascribed to its “total and dominant form,” or soul. See Introduction, §10.

7. Des Bosses quotes from the fifth of Antonio Perez’s six treatises on the second and third parts of the *Summa theologia*, the *Tractatus de incarnatione verbi divini* (see Letter 19, note 5).

8. Letter 50. The words in parentheses were added by Des Bosses.

9. Letter 50.

10. A Scholastic term of art signifying the natural suitability, or fittingness, of one kind of being for another. As Des Bosses uses the term, this suitability supports the claim that the existence of the one naturally “demands” or “requires” (*exigit*) the existence of the other.

11. That is, Part III, q. 77, of the *Summa theologia*, in which Aquinas discusses the nature of the sacrament.

12. Martin Smiglecius or Smiglecki, S.J. (1562–1618), author of various theological and philosophical works in Polish and Latin.

13. Letter 50.

14. Horace, *Epistles* II.2.126 ff. Horace describes a man who sits in an empty theater and claims to hear the actors.

15. Published as an appendix to the *Theodicy*: “Observations on the Book concerning ‘The Origin of Evil’ Published Recently in London” (G.vi.404–05/Huggard 409–10).

16. See Letter 49.

17. See Letter 49.

18. St. Prosper of Aquitaine (390?–455?). Prosper’s works include a text titled *Liber sententiarum ex Augustino deliberatarum*, but none with the title mentioned by Des Bosses. See *Sancti Prosperi Aquitani opera omnia* (Paris, 1846), 427–534.

19. Cf. I Cor. 12:12 ff.; Rom. 12:4–5.

20. Bossuet.

21. Sebastian Izquierdo, S.J. (1601–81), Spanish theologian, author of *Opus theologicum, iuxta atque Philosophicum de Deo uno . . .*, 2 vols. (Rome, 1664, 1670). Included with Letter 51 is a sheet containing several passages from the second volume of this work, which Des Bosses refers to as the *Treatise on God*. This is filed as LBr 95, Bl. 167. The obverse contains the report on Tolomei’s elevation which Des Bosses mentions in the first paragraph of the letter.

22. G.vi.29/Huggard 53–54.

23. See Letter 47, note 9.

Letter 52

1. B.N. f.1. 10355, fols. 128–29: letter as sent; four quarto sides in secretary’s hand with additions by Leibniz (our printed text). LBr 95, Bl. 170–71: draft; two and one-half quarto sides in Leibniz’s hand. Letter 52 answers Letter 51 and is answered by Letters 53 and 56.

2. Leibniz’s letter to Tolomei, dated 16 June 1712, and an accompanying letter from Des Bosses, are printed in D V, 561.

3. See Letter 51, note 21. *The Beacon of the Sciences* (*Pharus scientiarum*) forms part of the first volume of Izquierdo’s *Opus Theologicum, iuxta atque Philosophicum de Deo uno*.

4. See *Theodicy*, §§345–51.

5. *Theodicy*, Preface (G.vi.29/Huggard 53–54), §384 (G.vi.343/Huggard 355).

6. An allusion to the account offered by Des Bosses in the third paragraph of Letter 51.

7. In the draft Leibniz wrote “subject to my dominant monad [*sub mea monade dominante*].”

8. In the draft Leibniz wrote “degrees of perfection [*gradibus perfectionum*].” The sent version’s “degrees of perception” may be a copyist’s error. See, though, *Monadology*, §60: “[Monads] all go confusedly to infinity, to the whole; but they

are limited and differentiated by the degrees of distinct perceptions [*les degrés des perceptions distinctes*]” (G.vi.617/AG 221).

9. We have translated *factio* as “fiction,” although “supposition” would accord better with Leibniz’s evident seriousness about the reduction of bodies to phenomena (see especially the second paragraph of this letter). His use of the word is presumably ironic: a friendly dig at Des Bosses, for whom the reductive hypothesis is a fiction.

Letter 53

1. LBr 95, Bl. 174–76: six quarto sides in Des Bosses’s hand. Letter 53 answers Letter 52 and is answered by Letter 54.

2. Cf. *Physics* 240b8 ff.

3. In his reply to Tournemine Leibniz acknowledged the existence of a metaphysical union of soul and body but denied having any distinct knowledge of the basis of this union. See Letter 2, note 7.

4. *Summa theologiae* I, q. 3, art. 6; *ibid.*, Ia–IIae, q. 49, art. 2; and *De ente et essentia*, chap. 1.

5. See the preface to the *Theodicy* (G.vi.29).

6. Augustine, *Confessions* VIII.4. According to the story in the *Confessions*, Simplicianus was the Christian friend of Marius Victorinus, a noted orator and philosopher. Though Victorinus privately claimed to be a Christian, Simplicianus responded that he would not believe this until he saw Victorinus in a church. After a period of study and reflection, Victorinus is said to have gone to Simplicianus and declared, “Come, let us go to church; I wish to become a Christian.” It is unclear what Des Bosses intends by the comparison, for Leibniz shows no signs of converting to Catholicism.

7. This couplet, authored by Des Bosses, summarizes the Catholic response to Leibniz’s *Theodicy*: the book’s defense of God’s justice is to be commended, but it fails to address what is most vital—the faith necessary for salvation.

Letter 54

1. BN f.1. 10355, fols. 118–23: letter as sent; nine and one-half quarto sides in secretary’s hand with additions by Leibniz (our printed text). LBr 95, Bl. 177–78: draft; three and one-half quarto sides in Leibniz’s hand. Letter 54 answers Des Bosses’s letter of 7 August 1712 and Letter 53. It is answered by Des Bosses’s letter of 10 October 1712 and by Letter 56.

2. Caspar Castner. See Letter 43, note 4.

3. Martianus Minneus Felix Capella (flourished fifth century) was the author of *De nuptiis Philologiae et Mercurii*, an encyclopedia of the seven liberal arts.

4. Leibniz originally wrote and then deleted “immutable [*immutabilis*].”

5. The final sentence was added by Leibniz to the sent version and draft, re-

placing the following deleted sentence: “But the total impetus ceases to be when the direction or magnitude is changed [*Totalis autem impetus directione vel magnitudine mutata perit*].”

6. Leibniz should have written “each constituting a per se unity”: it is the organic bodies or substantiated things that constitute per se unities, not their aggregate.

7. For a fuller account of the relation of ideal causation among monads, see *Monadology*, §§49–52.

Letter 55

1. BN f.1. 10355, fols. 4–5: letter as sent; two and one-quarter octavo sides in Leibniz’s hand. Letter 55 answers Letter 53 and Des Bosses’s letter of 10 October 1712. The latter bears the date 10 October 1710—the date adopted by Gerhardt. The contents of the letter and of Leibniz’s response, however, make clear that it belongs between Letters 54 and 55. Des Bosses begins by saying that he arrived in Hildesheim several days before, and that because of other business and because he did not know whether Leibniz was in residence, he would not be coming to Hanover. In closing he indicates that the letter was dispatched “hurriedly [*raptim*]” from Hildesheim, which may account for the mistaken date. Evidently Leibniz received the letter the same day and replied immediately. Letter 55 is answered by Letter 56.

2. Konrad Barthold Behrens, M.D., who lived in Hildesheim. See Letter 5, note 2.

3. The book in question is *Magnum chronicon, in quo cum primis Belgicae Res et Familiae diligenter explicantur* (Frankfurt, 1607). The title page states what Leibniz here repeats concerning the author: “Authore vel collectore ordinis S. Augusti canonicorum Regularium prope Nussiam religioso.” The editor was Johannes Pistorius (1546–1608), a prominent Protestant theologian.

4. See Letter 50, note 5.

Letter 56

1. LBr 95, Bl. 179–82: letter as sent; eight quarto sides in Des Bosses’s hand. Letter 56 answers Letters 52, 54, and 55 and is answered by Letter 57.

2. See Letter 54.

3. See Letter 55.

4. James Gooden (d. 1730), an English Jesuit, taught for many years in Liège. The full title of the work is *Trigonometria plana et sphaerica, cum selectis ex geometria et astronomia Problematis. Accedunt Sinuum canones, et ex Euclide propositiones magis necessariae* (Liège, 1704). Because of the penal laws in England, English Jesuits formed an exile community in, among other places, present-day Belgium.

5. In place of the Latin *transsubstantionem*, which Leibniz had used, Des Bosses substitutes the Greek μετουσίασμὸν.

6. Letter 54.

7. Letter 52.

8. Letter 52.

9. Letter 52.

10. Letter 54.

11. Des Bosses labels two successive paragraphs “6.” In his notes on Letter 56, Leibniz distinguishes them as “6a” and “6b.”

12. Reading *facit* for Des Bosses’s *fuit*.

13. Letter 54.

14. The words in the parentheses were added by Des Bosses.

15. Letter 54. In the previous passage quoted by Des Bosses, Leibniz had spoken of “composite substance, or that thing that makes a bond of monads.” Leibniz goes on in Letter 54 to describe the logical or natural dependence of this composite substance, not of the substantial bond.

16. Appended to the letter is an excerpt of two quarto sides from disputation 8 of Smiglecius’s *Logic*. See Letter 51, note 12.

17. Letter 54.

18. Letter 54.

19. Letter 54.

20. Letter 54.

21. Letter 54.

22. See note 16.

23. Letter 54.

24. Letter 54.

25. Letter 54.

26. The words in the parentheses were added by Des Bosses.

27. Letter 54.

28. That is, while the monads of the bread are destroyed and replaced with the monads of the body of Christ, the remaining monads continue to have the same perceptions of the bread.

29. In other words, the monads of the body of Christ will be perceived by the other monads, but they will not assume the perceptions of the monads of the bread that they replace in the consecration of the eucharist.

30. Letter 54.

31. See Letter 18, note 7.

32. Letter 54.

33. See Letter 54, note 7. Des Bosses assumes that if certain monads A are the ideal causes of the perceptions of other monads B, it follows that the monads B must likewise be the ideal causes of the perceptions of monads A. To be the ideal cause of something requires, for Leibniz, being prior by nature to it. From this, Des Bosses infers that two things of the same kind could be prior by nature to each other—an apparent absurdity.

Letter 57

1. BN f.1. 10355, fols. 65–66: letter as sent; three quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 186–87: draft; three quarto sides in Leibniz's hand. LBr 95, Bl. 188–89: notes on Des Bosses's letter of 12 December 1712; four quarto sides in Leibniz's hand. LBr 95, Bl. 184–85: supplementary study; two and one-half quarto sides in Leibniz's hand. Letter 57 answers Letter 56 and is answered by Des Bosses's letters of 30 January and 11 February 1713, and by Letter 58. Before writing Letter 57, Leibniz composed a longer set of replies to the objections raised by Des Bosses in Letter 56. We print these, along with a further supplementary study associated with Letter 57.

2. In the draft Leibniz wrote and then crossed out: “whether they are real accidents, or an accidental bond of monads, or mere resulting phenomena, they will remain [*sive sint realia accidentia, sive vinculum accidentale Monadum, sive mera phaenomena resultantia, manebunt*]. . . .”

3. Tsar Peter the Great.

4. The package contained the second part of Des Bosses's translation of the *Theodicy*. See Des Bosses's letters of 5 December 1712 (G.ii.452) and 30 January 1713 (G.ii.476).

5. At the top of the page Leibniz wrote in German: “formulated differently and more briefly”—a reference to the letter he ultimately sent to Des Bosses.

6. The choice of “simples” as a translation of *incomplexa* is not entirely satisfactory, since it suggests a set of primitive terms, whereas Leibniz regards concepts that are *incomplexa* as generally resolvable into more basic concepts. Nevertheless, “simple”/“complex” seems to us the best translation of the Latin contrast *incomplexum/complexum*. A set of definitions from an essay composed during the 1680s, “Introduction to a Secret Encyclopedia,” supports this decision: “That which is thinkable is either simple [*simplex*] or complex [*complexum*]. That which is simple is called a ‘notion’ or ‘concept.’ That which is complex is that which involves in itself a proposition, i.e., an affirmation or negation, truth or falsity” (A VI.iv: 528/PW 6).

7. In the margin Leibniz wrote: “Or instead of connotational, we may say connoting [*An pro connotationalibus dicemus connotantes*].”

8. Originally Leibniz wrote and then crossed out: “they have a foundation in truths [*habent fundamentum in Veritatibus*].”

9. For a discussion of this terminology, see Parkinson 1966, xlv, n. 1; Mates 1986, 54–55.

Letter 58

1. LBr 95, Bl. 194–95: three quarto sides in Des Bosses's hand. Letter 58 answers Letter 57 and Leibniz's letters of 4 March and 29 April 1713. It is answered by Letter 59.

2. In fact, Leibniz spent all of 1713 in Vienna. See Müller and Krönert 1969.

3. G.vi.150.

4. G.vi.151. Although Des Bosses underlines the passage, indicating a quotation, it differs slightly from the French text of the *Theodicy*. The words in parentheses were added by him.

5. See Letter 51, note 10.

6. Philagrius Le Roy, *Philosophia radicalis eclectica inter Peripateticos et Anti-Peripateticos media ex selectissimis auctoribus compilata ex nova methodo juxta ordinem alphabeticum digesta in Tractatus Luberrimam praebens materiam meditandi de natura ejusque authore Deo* (Antwerp, 1713). Des Bosses's suspicions about the title page were well founded. Philagrius Le Roy was the pseudonym of the German Cistercian Georg Neubauer (1641–1715).

7. The work and author have not been identified. Sommervogel 1890 lists a Dominique Brunacci, S.J., who was at one time rector of the Collegio Romano; however, he died in 1695 and is not credited with a work of this title.

Letter 59

1. BN f.1. 10355, fols. 6–7: letter as sent; four octavo sides in Leibniz's hand (our printed text). LBr 95, Bl. 195: partial draft; one quarto side in Leibniz's hand appended to Des Bosses's letter of 8 August 1713. Letter 59 answers Letter 58 and is answered by Des Bosses's letter of 9 December 1713 and by Letter 61.

2. Emperor Charles VI (reigned 1711–40).

3. Leibniz deleted here: "otherwise there will be nothing substantial except monads [*alioqui nihil erit substantiale nisi monades*]."

4. In the draft of the letter, Leibniz wrote at this point: "For God sees by an intuitive knowledge even the phenomena of things, but he sees everything exactly and, as it were, from the center [*DEUS enim scientia visionis videt etiam phaenomena rerum, sed videt omnia exacte et tanquam ex centro*]."

5. In the draft, Leibniz added: "by a miracle [*per miraculum*]."

6. In the draft, Leibniz added: "so that a bond of them comes about [*ut vinculum earum fiat*]."

7. In the draft, Leibniz added: "while the absolute bond is preserved [*salvo vinculo absoluto*]."

8. Bodemann (LH 303) lists a text by Leibniz, written in Vienna in February 1713, that begins: "Since I had seen nothing until now of the writings of that most celebrated man Giorlamo Saccheri, I was all the more delighted by his *Neostatics*, published in Milan in 1708, which was sent to me by the Most Reverend Father Granello." Giovanni Girolamo Saccheri, S.J. (1667–1733), taught philosophy and theology at the University of Pavia (also known as the Università Ticinese) from 1697 until his death; in addition to the work to which Leibniz refers here, *Neo-Statica* (1708), he wrote *Logica demonstrativa* (1697) and *Euclides ab omni naevo vindicatus* (1733). In the latter he attempts to demonstrate Euclid's parallel postu-

late, and in doing so anticipates what has come to be known as non-Euclidean geometry.

9. Philippe Bonann, S.J. (see Letter 33, note 2). Leibniz refers to the plan to continue the *Bibliotheca scriptorum Societatis Jesu*, published in Rome in 1676. On this see Letter 41, note 5.

Letter 60

1. There is no surviving manuscript of Letter 60. We follow the reading of D, which is based on the letter received by Des Bosses and is the source for G. Letter 60 answers Des Bosses's letter of 9 December 1713 and is answered by Des Bosses's letter of 28 January 1714 and by Letter 61.

2. In his letter of 9 December, Des Bosses had asked Leibniz where the packet should be sent.

Letter 61

1. LBr 95, Bl. 199: letter as sent; two quarto sides in Des Bosses's hand. Letter 61 answers Letters 59 and 60 and is answered by Letter 62.

2. Filed as LBr 95, Bl. 200. In the first excerpt, from a letter dated 20 January 1714, Tournemine writes: "I shall send you all the issues of the *Journal de Trévoux* that have appeared since the last time I sent them to you (that is, since the month of September 1711). You will see there the review of the *Theodicy*. There are some errors in this excellent book." In the second excerpt, from a letter dated 13 March 1714, Tournemine writes: "Mr. Leibniz will be content. His *Theodicy* is being printed here. You would already have our review and all the issues you are missing of our journal if I had found a way of sending them. You will find in the review we have written of the *Theodicy* everything that appears erroneous or obscure in this work, whose Latin translation I am convinced will be welcome."

3. Des Bosses apparently refers to a debate about the nature of body and individuation played out in part in two shorter works of Aquinas, *De natura materiae et dimensionibus interminatis* (in Aquinas 1954, 129–45, esp. chap. 4; noted as "dubia vel spuria") and *De entia et essentia* (see Bobik 1965). According to Averroës, prime matter cannot exist apart from undetermined dimension; that is, prime matter is essentially extended and individuated by forms (see, *De substantia orbis*, chap. 1 [Venice, 1550]; quoted in Aquinas 1954, 134). For Aquinas, prime matter is the first principle of individuation, determinate extension the second.

4. Leibniz recorded the following comment at the bottom of the letter: "I do not see what modal bonds of monads could be other than mere relations, when a substantial bond has not yet been established [*Non video quid vincula modalia monadum aliud possint esse quam merae relationes, vinculo substantiali nondum constituto*]."

Letter 62

1. BN f.1. 10355, fol. 14: letter as sent; two quarto sides in Leibniz's hand (our printed text). LBr 95, Bl. 202: copy; two octavo sides in Leibniz's hand. Letter 62 answers Letter 61 and is answered by Letter 63.

2. In the copy, Leibniz wrote simply "with an organic body [*cum corpore organico*]."

3. See Letter 61, note 2. In the copy, Leibniz added above the line "of theodicy [*Theodicaeae*]."

Letter 63

1. LBr 95, Bl. 203: letter as sent; two quarto sides in Des Bosses's hand. Letter 63 answers Letter 62 and is answered by Leibniz's letter of 30 December 1714 and by Letter 64.

2. This should be 21 April.

3. Des Bosses refers here to the *Irish* philosopher George Berkeley (1685–1753), whose *Treatise concerning the Principles of Human Knowledge* was published in Dublin in 1710. His *Three Dialogues between Hylas and Philonous* followed in 1713.

Letter 64

1. Harvard University, Houghton Library MS Lat. 370: letter as sent; two quarto sides in Leibniz's hand. Letter 64 answers Letter 63 and Des Bosses's letter of 19 January 1715, and is answered by Letter 65.

2. In his letter of 19 January Des Bosses referred Leibniz to a book titled *De l'action de Dieu sur les créatures* (Paris, 1713), by Laurent-François Boursier. Boursier (1679–1749) was a Jansenist abbé, theologian, and member of the faculty of the Sorbonne. Malebranche's final work, *Refléxions sur la prémotion physique* (1715; OCM.xvi), was a response to Boursier's book.

3. See Letter 63, note 3. On the last page of his copy of Berkeley's *Principles of Human Knowledge* Leibniz wrote: "There is much here that is correct and close to my own view. But it is expressed paradoxically. For it is not necessary to say that matter is nothing, but it is sufficient to say that it is a phenomenon, like the rainbow; and that it is not a substance, but the resultant of substances, and that space is no more real than time, that is, that space is nothing but the order of coexistents, just as time is the order of things that have existed before. True substances are monads, that is, perceivers. But the author should have gone further, to the infinity of monads, constituting everything, and to their preestablished harmony. Badly, or at least in vain, he rejects abstract ideas, restricts ideas to imaginations, and condemns the subtleties of arithmetic and geometry. The worst thing is that he rejects the division

of extension to infinity, even if he might rightly reject infinitesimal quantities” (AG 307).

4. The experiment described in the next paragraph is designed to test whether magnetic force is a function of “verticity,” or the orientation of a magnet with respect to the magnetic axis of the Earth. Leibniz assumes that the magnet is in its natural position when its north pole is aligned with the Earth’s magnetic south pole. In the contrary “forced [*violentus*]” position, the same two poles are aligned. For further discussion, see Leibniz’s letter to Hartsoeker of 29 April 1715 (G.ii.497–98).

Letter 65

1. LBr 95, Bl. 211–12: letter as sent; three quarto sides in Des Bosses’s hand. Letter 65 answers Letter 64 and is answered by Letter 66.

2. See Letter 64. Gerhardt prints the excerpt from Hartsoeker’s letter that was sent by Des Bosses (G.ii.494–95).

3. See Letter 63.

4. This work by Fénelon (see Letter 18, note 4) was published in Paris in 1714 and reviewed in the *Mémoires de Trévoux* in October and November of the same year (pp. 1671–1709 and 1853–89).

5. As Des Bosses reports in a subsequent letter, the author of the work was the Jesuit Angelo Alamanni (see Letter 2, note 2). The book was reviewed in the *Mémoires de Trévoux* in May 1715 (pp. 803–38). It was later translated by Des Bosses into Latin, under the title *Epistolae abbatibus N. ad episcopum N. quibus demonstratur aequitas constitutionis Unigenitus . . .* (Cologne, 1717).

Letter 66

1. BN f.1. 10355, fols. 81–82: letter as sent; two and one-quarter quarto sides in Leibniz’s hand (our printed text). LBr 95, Bl. 213–14: fair copy; three quarto sides in secretary’s hand with additions by Leibniz. Letter 66 answers Letter 65 and is answered by Letter 67.

2. Enclosed with the letter was a letter intended for Hartsoeker, also dated 29 April 1715. In line with his desire (expressed in Letter 64) to conceal his identity, Leibniz added on the draft: “for Mr. Hartsoeker. The Reverend Father Des Bosses could send it to him in his name” (G.ii.497).

3. That is, when the magnet’s poles are aligned in opposition to the magnetic poles of the Earth.

4. In the copy, Leibniz wrote that “this bond [*hoc vinculum*]” will always adhere to the monad. It is clear that he means the dominant monad.

5. Fénelon. See Letter 65.

6. A book whose sheets are folded twelve times, now called “twelvemo.”

Letter 67

1. BN f.1. 10355, fols. 38–39: letter as sent; three quarto sides in Leibniz's hand. Letter 67 follows Letter 66 and is answered by Letter 68.

2. Gerhard Cornelius van den Driesch (d. 1758), author of *Exercitationes oratoriae et poeticae* (Vienna, 1718), which included a collection of letters exchanged with Leibniz during 1715–16. See Ravier 1937, 185–86.

3. See Letter 17.

4. Both Dutens and Gerhardt print *de monadibus* (concerning monads), although the manuscript contains a Greek phrase referring to the unification of monads.

5. *Causa Dei asserta per Justitiam ejus, cum caeteris ejus Perfectionibus cunctisque actionibus conciliatam* (Amsterdam, 1710), which was originally published as a separate tract and later included as an appendix to the *Theodicy*.

Letter 68

1. LBr 95, Bl. 218–19: letter as sent; four quarto sides in Des Bosses's hand. Letter 68 answers Letters 66 and 67 and is answered by Letter 69.

2. Euripides, *Hippolytus* 435.

3. See Letter 66.

4. The problem of a vacuum of forms is, as Leibniz puts it in the *New Essays*, “whether there are possible species which do not actually exist, so that nature might seem to have overlooked them” (A VI.vi: 307/NE 307).

5. See Letter 11 and Letter 9, note 2. In Letter 69, Leibniz responds that he has no recollection of having been told about the propositions, whose condemnation he rightly sees as a reaction against Descartes's philosophy.

6. Ovid, *Metamorphoses* II.5.

7. See, for example, Apollodorus, *Library and Epitome* 3.5.5.

8. For Leibniz's work on the popess, see Letter 27, note 2.

9. See Letter 65, note 5.

10. The book is likely *Remarques, en forme de dissertations, sur les propositions condamnées par la Bulle Unigenitus, ou IV. Colone des Hexaples; dans laquelle on fait la comparaison de la nouvelle doctrine des Jesuites autorisée par la Bulle, avec la doctrine de l'Eglise*, 2 vols. (Amsterdam[?], 1723).

11. This work has not been identified.

Letter 69

1. BrM Add. 5104, fols. 8–9: letter as sent; four quarto sides in secretary's hand with additions by Leibniz (our printed text). LBr 95, Bl. 220–21: draft, dated 21 July 1715; four quarto sides in Leibniz's hand. Letter 69 answers Letter 68. Des Bosses's reply is not extant.

2. In the draft, Leibniz initially wrote and then deleted that the other question was “whether or not other monads exist [*an non aliae Monades existerent alia*].”

3. Leibniz is probably referring to Fabri’s *Apologeticus doctrinae moralis ejusdem societatis. In quo variis tractibus, diversorum auctorum opuscula confutantur, quorum nomina sequens Elenchus dabit, et selecta quaedam morales questiones discutuntur* (Cologne, 1672).

4. In the draft, Leibniz initially opened the paragraph with the following, which he then deleted: “But if you think that it is gratuitous to posit monads, like Scholastic qualities, we will need to return [*Quod si gratis poni Monades putas, ut qualitates scholasticas, redeundum nobis*]. . . .”

5. According to Chauvin’s *Lexicon philosophicum* (1713), a “predicamental accident [*accidens praedicamentale*]” is a mode affecting a created substance, which, therefore, cannot exist apart from the created substance; a “predicable accident [*accidens praedicabile*]” is either concrete or abstract; therefore, it can be said to be separable from substance. For further discussion, see Mates 1986, 211.

6. Publius Alfenus Varus, suffect consul in 39 B.C., wrote forty books of *Digests* that were later compiled by Justinian.

7. In the draft, Leibniz wrote “mere phenomena [*mera phaenomena*].”

8. For Hartsoeker’s response, see G.ii.513–14.

9. Parts of this work were not published until the mid-nineteenth century: *God-ofr. Wilh. Leibnitii Annales Imperii Occidentis Brunsvicensis ex Codicibus Bibliothecae Regiae Hanoveranae*, ed. Georg Heinrich Pertz, 3 vols. (Hanover, 1843–46). See Ravier 1937, 365, 370, 375.

Letter 70

1. BN f.1. 10355, fols. 146–47: letter as sent; five quarto sides in secretary’s hand with additions by Leibniz. Letter 70 answers a letter from Des Bosses that is no longer extant. The nonphilosophical parts of Letter 70 are answered by Des Bosses’s letter of 7 March 1716, in which he closes with the following: “I had intended to add here separately (following your example) some remarks on your latest philosophical meditations, but since they are not yet ready to be made public, they will have to wait until the next post” (G.ii.513). As no further letters from Des Bosses are preserved, we have no record of his response to Leibniz’s reflections in Letters 70 and 71.

2. Leibniz refers to his *Discours sur la théologie naturelle des Chinois*, written for Nicholas Remond. See Remond’s letter of 4 September 1715 (G.iii.651) and Leibniz’s letter to Remond of 27 March 1716, in which he says that he needs more time to bring the work to completion (G.iii.675). It remained unfinished at his death. For a translation of the text, see Cook and Rosemont 1994. For further discussion, see Ribas 2003; Perkins 2004.

3. Niccolò Longobardi, S.J. (1565–1655), was the successor to Matteo Ricci in the Chinese mission; however, he did not share Ricci’s tolerant view of Chinese

religion. His work *Responsio brevis super controversias de Xamti, hoc est de altissimo Domino, de Tien-chin, id est de spiritibus coelestibus, de Lim-hoên, id est de anima rationali* was completed in 1623, and later taken to Rome by Antonio Caballero de Santa Maria (1602–69) and translated into Spanish. A French translation of the Spanish version appeared in 1701 as *Traité sur quelques points de la religion des Chinois* and is presumably the work to which Leibniz refers.

4. Ernst von Cochenheim, counselor to the prince-bishop of Münster (see Letter 30). Charles Irénée Castel de Saint-Pierre (1658–1743), French social philosopher, author of *Projet pour rendre la paix perpétuelle en Europe* (Utrecht, 1713). His correspondence with Leibniz is published in Robinet 1995. For translations of Leibniz's responses to the work, see Riley 1988.

5. Most likely Ernst, Landgraf von Hessen-Rheinfels's anonymously published *Der so wahrhafftige, als gantz aufrichtig- und discret-gesinnte Catholischer, Das ist, Tractat oder Discours . . . über Den heutigen Zustand des Religions-WeSENS in der Welt*. The place of publication was apparently suppressed. The title page reads: "Getruckt in einer solchen Stadt, daselbsten es an Catholischen Kirchen gewiss nicht ermangelt, 1666" (Printed in such a town that is certainly not lacking in Catholic churches, 1666).

6. *Acta conciliorum et epistolae decretales, ac constitutiones summorum pontificum* (Paris, 1714–15); only eleven volumes were published. The editor was Jean Hardouin, S.J. (1646–1729), who, as Leibniz indicates, emended the earlier edition of Philippe Labbe, S.J. (1607–67), and Gabriel Cossart, S.J. (1615–74).

7. Most likely Joseph Maria Fonseca, S.J., not the Pedro Fonseca mentioned in Letter 1.

8. As Leibniz acknowledges in Letter 71, Lamindo Pritanio was in fact the pseudonym of the Italian scholar Luigi Antonio Muratori (1672–1750). He had first used the pseudonym in his plan for an Italian literary society, *Primi disegni della Repubblica Letteraria d'Italia*, published in 1703. This was followed by *Della perfetta poesia Italiana* (Modena, 1706) and *Riflessioni sopra il buon gusto nelle scienze e nelle arti* (Venice, 1708).

9. See Letter 65, note 5.

10. Without Des Bosses's letter the particular passage or work cannot be identified. On Sforza Pallavicino, see Letter 23, note 3. The "signatures of things" refers to the esoteric natural philosophy of Jakob Boehme.

11. See Letter 14, note 3

12. That is, Leibniz wished to purchase part of the *Acta sanctorum*, ed. J. Boland, D. Papebroch, et al. (Antwerp, 1643 ff.), which was published according to the saints' days.

13. As Des Bosses's response makes clear, Leibniz's request was for *Recueil de pièces touchant l'histoire de la Compagnie de Jesus*, ed. Joseph Jouvenci, S.J. (Liège, 1713). Jouvenci also published a collection of *Orationes* (Paris, 1714), to which Leibniz alludes in praising his "elegant style."

14. See Letters 41 and 59.

15. See Letter 67, note 2.

16. The argument of this paragraph, which appears again at the beginning of Letter 71, is best known from Leibniz's contemporary correspondence with the English theologian Samuel Clarke (1675–1729). See his third (§§5–7) and fourth (§§13–17) letters to Clarke, dated respectively 25 February and 2 June 1716 (G.vii.363–64, 373–74). The two correspondences intersect on this topic. In his second reply to Leibniz, dated 10 January 1716, Clarke argues that the “mere will of God” is sufficient to explain the creation of a system of matter in one particular place rather than another (G.vii.359); however, Clarke does not raise the parallel point about the creation of the world in time. When Leibniz introduces the argument about time in §6 of his third letter, therefore, he is almost certainly drawing on the “elegant objection” posed in Des Bosses's lost letter, to which Letter 70 is a response.

17. See G.iv.466–67. Leibniz's argument in the *Journal des savants* was that extension alone is insufficient to explain the natural inertia of matter.

18. In Letter 48 Leibniz appeals to the traditional definition of extension as that which has “parts outside of parts [*partes extra partes*].”

19. Throughout this passage, Leibniz uses *virtus*, which we translate as “power.”

Letter 71

1. British Library, Add. MS 5104, fols. 12–15: eight quarto sides in secretary's hand with additions by Leibniz. The place and date have been added in Leibniz's hand above the salutation. Letter 71 answers Des Bosses's letter of 7 March 1716 and perhaps a further letter from him that is no longer extant. It is the last letter of the correspondence.

2. Girolamo Cardano (1501–76), best known for his work *Ars magna* (1545), in which he offered methods for the solution of cubic and quartic equations. Christopher Clavius, S.J. (1538–1612), longtime professor of mathematics at the Collegio Romano; author of influential texts in geometry, arithmetic, and algebra; and inventor of the Gregorian calendar, defended in *Novi calendarii Romani apologia* (1595).

3. See Letter 70, note 16.

4. See *Theodicy*, §7 (G.vi.106–07).

5. See *Theodicy*, §66 (G.vi.138–39); *Monadology*, §§49–52 (G.vi.615).

6. Originally Leibniz had written “that is, in neither, or in the perceiver [*id est in neutra seu percipiente*].” He then corrected this to read: “that is, really in neither, or only in the mind thinking this relation [*id est revera in neutra seu in sola mente hanc relationem cogitante*].” Gerhardt's text here is at odds with the manuscript and changes the sense of the sentence: “that is, really in neither, but in the mind alone. You will not understand this relation [*id est, revera in neutra, sed in sola mente; hanc relationem non intelliges*]” (G.ii.517/AG 203).

7. We follow AG in reading *adest* for Leibniz's *abest*.

8. Frémont (1981, 209) suggests the early Church Father Cyril of Jerusalem (ca. 315–86) as a defender of this position.

9. See Letter 70, note 8. The town of Commachio was at the center of a dispute between the pope and the dukes of Este over the sovereignty of the district of Ferrara. Muratori supported the claims of the dukes through historical research, much as Leibniz did in the case of their German cousins, the dukes of Brunswick-Wolfenbüttel. The two men began a correspondence in 1708 that continued until Leibniz's death (see Müller and Krönert 1969, 211 ff.).

10. See *Theodicy*, Preface (G.vi.45).

11. See Letter 70, note 7.

12. Reading, with G, *friguscula* for Leibniz's *fribuscula*.

Bibliography

- ABERCROMBIE, NIGEL. 1936. *The Origins of Jansenism*. Oxford: Clarendon Press.
- ADAMS, ROBERT M. 1994. *Leibniz: Determinist, Theist, Idealist*. New York: Oxford University Press.
- . 2005. "Moral Necessity." In Rutherford and Cover 2005, 181–23.
- ANTOGNAZZA, MARIA ROSA. 2002. "Leibniz and Religious Toleration: The Correspondence with Paul Pellisson-Fontanier." *American Catholic Philosophical Quarterly* 76, 601–22.
- . 2007. *Leibniz on the Trinity and Incarnation: Reason and Revelation in the Seventeenth Century*. Trans. Gerald Parks. New Haven: Yale University Press.
- AQUINAS, THOMAS. 1954. *Opuscula theologica*. Ed. Raymundo M. Spiazzi. Turin: Marietti.
- ARIEW, ROGER. 1994a. "Damned If You Do: Cartesians and Censorship, 1663–1706." *Perspectives on Science* 54, 244–74.
- . 1994b. "Quelques condamnations du cartésianisme." *Archives de philosophie* 57, "Bulletin cartésien 21/22," 1–6.
- . 1999. *Descartes and the Last Scholastics*. Ithaca, N.Y.: Cornell University Press.
- AVERROËS. 1953. *Commentarium magnum in Aristotelis De anima libros*. Ed. F. Stuart Crawford. Cambridge, Mass.: Mediaeval Academy of America.
- BAXTER, DONALD L. M. 1995. "Corporeal Substances and True Unities." *Studia Leibnitiana* 27, 157–84.
- BERTOLONI MELI, DOMENICO. 1993. *Equivalence and Priority: Newton versus Leibniz*. New York: Oxford University Press.
- Biographie nationale*. 1876. Brussels: Bruylant-Christophe.
- Biographie universelle, ancienne et moderne* . . . 1811–62. 85 vols. Paris: Michaud.
- BLONDEL, MAURICE. 1930. *Une énigme historique: le "vinculum substantiale" d'après Leibniz et l'ébauche d'un réalisme supérieur*. Paris: Beauchesne.
- . 1946. "Souplesse et sincérité de Leibniz." *Giornale di Metafisica* 1, 474–77.
- . 1972. *Le lien substantiel et la substance composée d'après Leibniz*. Ed. and trans. Claude Troisfontaines. Louvain: Nauwelaerts. (Contains Blondel's treatise of 1893.)

- BOBIK, JOSEPH. 1965. *Aquinas on Being and Essence: A Translation and Interpretation*. Notre Dame, Ind.: Notre Dame University Press.
- BODEMANN, EDUARD. 1889. *Die Leibniz-Handschriften der Königlichen Öffentlichen Bibliothek zu Hannover*. Hanover: Hahn, 1889; reprint ed. Hildesheim: Olms, 1966.
- . 1895. *Der Briefwechsel des Gottfried Wilhelm Leibniz in der Königlichen Öffentlichen Bibliothek zu Hannover*. Hanover: Hahn; reprint ed. Hildesheim: Olms, 1966.
- BOEHM, A. 1962. *Le "Vinculum substantiale" chez Leibniz*. Paris: J. Vrin.
- BRATHER, HANS-STEPHAN, ed. 1993. *Leibniz und seine Akademie : Ausgewählte Quellen zur Geschichte der Berliner Sozietät der Wissenschaften 1697–1716*. Berlin: Akademie Verlag.
- BRUNTSCHWIG, J., ed. 1969. *Gottfried Wilhelm Leibniz, Essais de théodicée sur la bonté de Dieu, la liberté de l'homme, et l'origine du mal*. Paris: Garnier-Flammarion.
- BUSCHE, HUBERTUS. 1997. *Leibniz' Weg ins perspektische Universum: Eine Harmonie im Zeitalter der Berechnung*. Hamburg: Felix Meiner.
- Catholic Encyclopedia*. 1907–12. New York: Appleton.
- CHAUVIN, STEPHAN. 1713. *Lexicon philosophicum*. 2nd ed. Leovardiae; reprint ed. Düsseldorf: Stern-Verlag Janssen, 1967.
- COLLANI, CLAUDIA VON. 2000. "Gottfried Wilhelm Leibniz and the China Mission of the Jesuits." In Li and Poser 2000, 89–103.
- COOK, ALAN. 1998. *Edmond Halley: Charting the Heavens and the Seas*. Oxford: Clarendon Press.
- COOK, DANIEL J., and HENRY ROSEMONT, JR., trans. 1994. *Gottfried Wilhelm Leibniz, Writings on China*. Chicago: Open Court.
- COUTURAT, LOUIS. 1901. *La logique de Leibniz, d'après des documents inédits*. Paris: Felix Alcan; reprint ed. Hildesheim: Olms, 1961.
- COVER, J. A., and JOHN O'LEARY-HAWTHORNE. 1999. *Substance and Individuation in Leibniz*. Cambridge: Cambridge University Press.
- DE BACKER, AUGUSTIN, and ALOIS DE BACKER. 1853–61. *Bibliothèque des écrivains de la Compagnie de Jésus*. 8 vols. Liège: L. Grandmont-Donners.
- DENZINGER, HEINRICH. 1991. *Enchiridion symbolorum definitionum et declarationum de rebus fidei et morum*. 37th rev. ed. Ed. Peter Hünerman. Freiburg: Herder.
- Dictionnaire de théologie catholique*. 1899–1950. Paris: Letouzey et Ané.
- DUHR, BERNHARD, S. J. 1921. *Geschichte der Jesuiten in der Ländern deutscher Zunge*. 4 vols. Munich: G. J. Manz.
- DUMAS, GUSTAVE. 1936. *Histoire du Journal de Trévoux, depuis 1701 jusqu'en 1762*. Paris: Bouvin.

- FEINGOLD, MORDECHAI, ed. 2003a. *Jesuit Science and the Republic of Letters*. Cambridge, Mass.: MIT Press.
- . 2003b. *The New Science and Jesuit Science: Seventeenth Century Perspectives*. Boston: Kluwer.
- FINSTER, REINHARD, ed. and trans. 1997. Gottfried Wilhelm Leibniz, *Der Briefwechsel mit Antoine Arnauld*. Hamburg: Felix Meiner.
- FONSECA, PEDRO. 1615. *Petri Fonsecae Commentariorum in libros Metaphysicorum Aristotelis Stagiritae Tomus I–II*. Cologne; reprint ed. Hildesheim: Olms, 1962.
- FRÉMONT, CHRISTIANE. 1981. *L'être et la relation*. Paris: J. Vrin.
- . 1999. *L'être et la relation*. Rev. ed. Paris: J. Vrin.
- GALILEI, GALILEO. 1957. *Discoveries and Opinions of Galileo*. Trans. Stillman Drake. Garden City, N.Y.: Doubleday/Anchor.
- GAMS, P. PIUS BONIFACIUS. 1873. *Series Episcoporum Ecclesiae Catholicae*. Regensburg: George Joseph Manz.
- GARBER, DANIEL. 1985. "Leibniz and the Foundations of Physics: The Middle Years." In Kathleen Okruhlik and James Robert Brown, eds., *The Natural Philosophy of Leibniz*. Hingham, Mass.: Kluwer, 27–130.
- GRAESSE, J., et al. 1972. *Orbis Latinus*. 3 vols. Braunschweig: Klinkhardt & Biermann.
- GRUA, GASTON. 1953. *Jurisprudence universelle et théodicée selon Leibniz*. Paris: Presses Universitaires de France; reprint ed. New York: Garland, 1985.
- HARTZ, GLENN. 1998. "Why Corporeal Substances Keep Popping Up in Leibniz's Later Philosophy." *British Journal of the History of Philosophy* 6, 193–207.
- HILLENAAR, HENK. 1967. *Fenelon et les jésuites*. The Hague: M. Nijhoff.
- JÖCHER, CHRISTIAN GOTTLIEB. 1751. *Allgemeines Gelehrten Lexicon*. 4 vols. Leipzig; reprint ed. Hildesheim: Olms, 1961.
- KABITZ, WILLY. 1932. "Leibniz und Berkeley." *Sitzungsberichte der Preussischen Akademie der Wissenschaften, Phil. Hist. Klasse* (Berlin) 24, 623–36.
- KNEBEL, SVEN. 1991. "Necessitas moralis ad optimum: Zum historischen Hintergrund der Wahl der besten aller möglichen Welten." *Studia Leibnitiana* 23, 3–24.
- . 1992a. "Necessitas moralis ad optimum. Die früheste scholastische Absage an den Optimismus." *Theologie und Philosophie Vierteljahresschrift* 67, 514–535.
- . 1992b. "Necessitas moralis ad optimum (III). Naturgesetz und Induktionsproblem in der Jesuitenscholastik während des zweiten Drittels des 17. Jahrhunderts." *Studia Leibnitiana* 24, 182–215.

- . 1993. "Necessitas moralis ad optimum (IV). Repertorium zur Optimismusdiskussion im 17. Jahrhundert." *Studia Leibnitiana* 25, 201–208.
- KREISER, B. ROBERT. 1978. *Miracles, Convulsions, and Ecclesiastical Politics in Early Eighteenth-Century Paris*. Princeton: Princeton University Press.
- KREMER, ELMAR J. 1994. "Grace and Free Will in Arnauld." In Elmar J. Kremer, ed., *The Great Arnauld and Some of His Philosophical Correspondents*. Toronto: University of Toronto, 219–39.
- LACH, DONALD F., and EDWIN J. VAN KLEY. 1993. *Asia in the Making of Modern Europe*. Vol. 3: *A Century of Advance*. Chicago: University of Chicago Press.
- LE ROY, ALBERT. 1976. *La France et Rome de 1700 à 1715: Histoire diplomatique de la bulle Unigenitus jusqu'à la mort de Louis XIV d'après des documents inédits*. Geneva: Slatkine.
- LEWIS, C. T., and C. SHORT. 1969. *A Latin Dictionary*. Oxford: Clarendon Press.
- LI, WENCHAO, and HANS POSER, eds. 2000. *Das Neueste über China*. *Studia Leibnitiana Supplementa*, vol. 23. Stuttgart: Franz Steiner.
- LODGE, PAUL, ed. 2004. *Leibniz and His Correspondents*. New York: Cambridge University Press.
- LOOK, BRANDON. 1998. "On an Unpublished Manuscript of Leibniz (LH IV, I, 1a, Bl. 7): New Light on the *Vinculum Substantiale* and the Correspondence with Des Bosses." *Leibniz Society Review* 8, 69–79.
- . 1999. *Leibniz and the "Vinculum Substantiale"*. Stuttgart: Franz Steiner.
- . 2002. "On Monadic Domination in Leibniz's Metaphysics." *British Journal for the History of Philosophy* 10, 379–399.
- . 2004. "On Substance and Relations in Leibniz's Correspondence with Des Bosses." In Lodge 2004, 238–261.
- MANDELBAUM, ALLEN, trans. 1985. *The Aeneid of Virgil*. New York: Bantam Books.
- MATES, BENSON. 1986. *The Philosophy of Leibniz: Metaphysics and Language*. New York: Oxford University Press.
- MATHIEU, VITTORIO. 1960. *Leibniz e Des Bosses (1706–1716)*. Turin: Facoltà di Lettere e Filosofia.
- MERCER, CHRISTIA. 2001. *Leibniz's Metaphysics: Its Origins and Development*. New York: Cambridge University Press.
- MOLINA, LUIS DE. 1953. *Liberi arbitrii cum gratiae donis, divina praescientia, providentia, praedestinatione et reprobatione concordia*. Ed. J. Rabeneck. Oña: Colegio Máximo S. I.

- MÜLLER, KURT, and GISELA KRÖNERT. 1969. *Leben und Werk von G. W. Leibniz. Eine Chronik*. Frankfurt am Main: Vittorio Klostermann.
- MUNGELLO, DAVID E. 1977. *Leibniz and Confucianism: The Search for Concord*. Honolulu: University Press of Hawaii.
- MURRAY, MICHAEL J. 1996. "Intellect, Will, and Freedom: Leibniz and His Precursors." *Leibniz Society Review* 6, 25–59.
- . 2002. "Leibniz's Proposal for Theological Reconciliation among the Protestants." *American Catholic Philosophical Quarterly* 76, 623–646.
- . 2004. "Pre-Leibnizian Moral Necessity." *Leibniz Review* 14, 1–28.
- . 2005. "Spontaneity and Freedom in Leibniz." In Rutherford and Cover 2005, 194–216.
- NEWTON, ISAAC. 1999. *The Principia: Mathematical Principles of Natural Philosophy*. Trans. I. Bernard Cohen and Anne Whitman. Berkeley: University of California Press.
- NIERMEYER, J. F. 1976. *Mediae latinitatis lexicon minus*. Leiden: Brill.
- PADBERG, JOHN W., MARTIN D. O'KEEFE, and JOHN L. MCCARTHY. 1994. *For Matters of Greater Moment: The First Thirty Jesuit General Congregations*. St. Louis, Mo.: Institute of Jesuit Sources.
- PARKINSON, G. H. R., ed. 1966. *Leibniz: Logical Papers*. Oxford: Clarendon Press.
- PERKINS, FRANKLIN. 2004. *Leibniz and China: A Commerce of Light*. New York: Cambridge University Press.
- RAVIER, EMILE. 1937. *Bibliographie des oeuvres de Leibniz*. Paris: Félix Alcan.
- RIBAS, ALBERT. 2003. "Leibniz's *Discourse on the Natural Theology of the Chinese* and the Leibniz-Clarke Controversy." *Philosophy East and West* 52, 65–86.
- RILEY, PATRICK, ed. 1988. *Leibniz: Political Writings*. 2nd ed. New York: Cambridge University Press.
- RILEY, PATRICK. 2000. "Leibniz' Political and Moral Philosophy in the *No-vissima Sinica*." In Li and Poser 2000, 239–57.
- ROBINET, ANDRÉ. 1969. "Du nouveau sur la correspondance Leibniz—Des Bosses." *Studia Leibnitiana* 1, 83–103.
- . 1986. *Architectonique disjonctive, automates systémiques et idéalité transcendante dans l'oeuvre de G.W. Leibniz: nombreux textes inédits*. Paris: J. Vrin.
- . 1988. *G.W. Leibniz: Iter Italicum*. Florence: Olschki.
- ROBINET, ANDRÉ, ed. 1995. *Correspondance G.W. Leibniz—Ch. I. Castel de Saint-Pierre*. Paris: Centre de Philosophie du Droit.

- ROBINET, ANDRÉ. 2000. "La rencontre Leibniz-Grimaldi à Rome et l'avenir des académies." In Li and Poser 2000, 79–88.
- ROY, OLIVIER. 1972. *Leibniz et la Chine*. Paris: J. Vrin.
- RUSSELL, BERTRAND. 1937. *A Critical Exposition of the Philosophy of Leibniz*. 2nd ed. London: Allen & Unwin.
- RUTHERFORD, DONALD. 1994. "Leibniz and the Problem of Monadic Aggregation." *Archiv für Geschichte der Philosophie* 76, 65–90.
- . 1995. *Leibniz and the Rational Order of Nature*. New York: Cambridge University Press.
- . 1996. "Demonstration and Reconciliation: The Eclipse of the Geometrical Method in Leibniz's Philosophy." In Roger S. Woolhouse, ed., *Leibniz's "New System" (1695)*. Florence: Olschki, 181–201.
- . 2003. "Patience sans espérance: Leibniz's Critique of Stoicism." In Jon Miller and Brad Inwood, eds., *Hellenistic and Early Modern Philosophy*. Cambridge: Cambridge University Press, 62–89.
- . 2004. "Idealism Declined: Leibniz and Christian Wolff." In Lodge 2004, 214–37.
- RUTHERFORD, DONALD, and J. A. COVER, eds. 2005. *Leibniz: Nature and Freedom*. New York: Oxford University Press.
- SLEIGH, R. C., JR. 1990. *Leibniz and Arnauld: A Commentary on Their Correspondence*. New Haven: Yale University Press.
- SLEIGH, R. C., JR., ed. and trans. 2005. Gottfried Wilhelm Leibniz, *Confessio Philosophi*. New Haven: Yale University Press.
- SLEUMER, ALBERT. 1926. *Kirchenlateinisches Wörterbuch*. Limburg an der Lahn: Gebrüder Steffan.
- SOMMERVOGEL, CARLOS. 1884. *Dictionnaire des ouvrages anonymes et pseudonymes publié par des religieux de la Compagnie de Jésus*. Paris; reprint ed. Amsterdam: B. M. Israël, 1966.
- . 1890. *Bibliothèque de la Compagnie de Jésus*. 12 vols. Brussels: O. Schepens. Reprint ed. Louvain: Editions de la Bibliothèque S.J., 1960.
- SUÁREZ, FRANCISCO, S.J. 1856–78. *Opera omnia*. 28 vols. Ed. C. Berton. Paris: Vivès.
- WEISHEIPL, JAMES A. 1963. "The Concept of Matter in Fourteenth Century Science." In E. McMullin, ed., *The Concept of Matter*. South Bend, Ind.: University of Notre Dame Press.
- WIDMAIER, RITA, ed. 1990. *Leibniz Korrespondiert mit China: Der Briefwechsel mit den Jesuitenmissionaren (1689–1714)*. Frankfurt am Main: Vittorio Klostermann.
- WILSON, CATHERINE. 1989. *Leibniz's Metaphysics: A Historical and Comparative Study*. Princeton: Princeton University Press.

- WOOLHOUSE, R. S., and RICHARD FRANCK, eds. and trans. 1997. *Leibniz's "New System" and Associated Contemporary Texts*. Oxford: Clarendon Press.
- ZABARELLA, JACOPO. 1606–07. *De rebus naturalibus*. In *Aristotelis libros De anima*. Frankfurt: reprint ed. Frankfurt: Minerva.

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